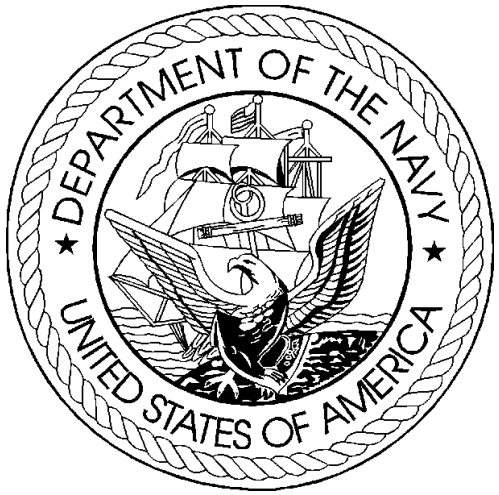
DEPARTMENT OF THE NAVY
FY 1998/1999 BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES

OTHER PROCUREMENT, NAVY
BUDGET ACTIVITY 1

FEBRUARY 1997

EXHIBIT P-1

DEPARTMENT OF THE NAVY
FY 1998/FY 1999 PROCUREMENT PROGRAMS

APPROPRIATION: 1810N Other Procurement, Navy DATE: 02/04/97

LINE NO	ITEM NOMENCLATURE	IDENT CODE	DOLLARS FY 1998 UNIT COST	MILLIONS OF DOLLARS FY 1996 QUANTITY	FY 1996 COST	FY 1997 QUANTITY	FY 1997 COST	FY 1998 QUANTITY	FY 1998 COST	FY 1999 QUANTITY	FY 1999 COST	
BUDGET ACTIVITY 01: Ships Support Equipment												
Ship Propulsion Equipment												
1	0110 LM-2500 Gas Turbine	A			6.3		7.7		7.5		8.9	U
2	0120 Allison 501K Gas Turbine	A			7.0		3.4		5.9		6.9	U
3	0157 Steam Propulsion Improvement	A			1.1		0.2		0.5		0.6	U
4	0180 Other Propulsion Equipment	A			9.3		7.8		12.1		6.2	U
Generators												
5	0260 Other Generators	A			5.0		-		1.8		9.2	U
Pumps												
6	0320 Other Pumps	A			0.8		0.1		0.4		4.1	U
Propellers												
7	0510 Submarine Propellers	A			-		36.4		-		13.3	U
8	0540 Other Propellers and Shafts	A			1.5		2.8		1.5		2.9	U
Navigation Equipment												
9	0670 Other Navigation Equipment	A			25.7		26.5		31.6		46.0	U
Underway Replenishment Equipment												
10	0740 Underway Replenishment Equipm	A			11.7		11.6		8.2		8.7	U
Periscopes												
11	0831 Sub Periscopes & Imaging Equi	A			23.9		31.9		32.1		27.9	U
Other Shipboard Equipment												
12	0910 Firefighting Equipment	A			15.3		9.0		14.1		16.5	U
13	0925 Command and Control Switchboa	A			4.6		6.8		8.0		8.1	U
14	0935 Pollution Control Equipment	B			103.2		127.5		156.8		218.6	U
15	0940 Submarine Silencing Equipment	A			5.0		4.5		4.3		3.5	U
16	0945 Submarine Batteries	A			7.2		9.3		9.0		8.9	U
17	0949 SSN21 Class Support Equipment	A			4.9		20.8		6.4		15.9	U
18	0950 Strategic Platform Support Eq	A			4.4		9.0		6.4		6.9	U
19	0955 DSSP Equipment	A			6.5		5.1		7.3		7.4	U
20	0975 Minesweeping Equipment	A			0.1		4.0		4.9		0.4	U
21	0980 HM&E Items Under $2 Million	A			33.8		28.8		51.1		84.6	U
22	0983 Surface IMA	A			1.4		2.4		2.0		0.1	U
23	0987 Radiological Controls	A			0.1		0.2		0.2		0.3	U
24	0988 Mini/Micromini Electronic Rep	A			1.0		0.9		0.5		0.5	U

EXHIBIT P-1

DEPARTMENT OF THE NAVY
FY 1998/FY 1999 PROCUREMENT PROGRAMS

APPROPRIATION: 1810N Other Procurement, Navy DATE: 02/04/97

LINE NO	ITEM NOMENCLATURE	IDENT CODE	DOLLARS FY 1998 UNIT COST	MILLIONS OF DOLLARS FY 1996 QUANTITY	FY 1996 COST	FY 1997 QUANTITY	FY 1997 COST	FY 1998 QUANTITY	FY 1998 COST	FY 1999 QUANTITY	FY 1999 COST	
Reactor Plant Equipment												
25	1010 Reactor Power Units	A			-		189.3		108.5		233.3	U
26	1020 Reactor Components	A			184.9		179.2		193.9		198.2	U
Ocean Engineering												
27	1130 Diving and Salvage Equipment	A			7.8		8.5		4.9		5.6	U
28	1140 EOD Underwater Equipment	B			5.1		5.1		9.1		8.7	U
Small Boats												
29	1210 Standard Boats	A			5.8		4.5		4.9		5.6	U
Training Equipment												
30	1320 Other Ships Training Equipmen	A			4.9		1.4		1.8		1.9	U
Production Facilities Equipment												
31	1415 Production Support Facilities	A			6.9		2.9		0.4		0.4	U
32	1445 Operating Forces IPE	A			0.8		0.9		0.9		0.9	U
Other Ship Support												
33	1480 Nuclear Alterations	A			118.5		67.1		74.1		109.8	U
34	1490 Modernization Support	A			3.0		-		-		-	U
TOTAL	Ships Support Equipment				617.8		815.6		771.1		1070.8	

Other Procurement, Navy
Program and Financing (in Thousands of dollars) SUMMARY

Identification code 17-1810-0-1-051		Budget Plan (amounts for actions programed) PROCUREMENT			
		1996 actual	1997 est.	1998 est.	1999 est.
	Program by activities:				
	Direct program:				
00.0101	Ships support equipment	617,796	815,611	771,120	1,070,756
00.0201	Communications and electronics equipment	781,611	1,044,672	925,763	1,583,978
00.0301	Aviation support equipment	192,128	249,793	169,250	255,932
00.0401	Ordnance support equipment	396,264	468,410	539,662	692,543
00.0501	Civil engineering support equipment	46,716	43,943	53,610	81,860
00.0601	Supply support equipment	93,966	67,709	56,528	127,373
00.0701	Personnel and command support equipment	115,439		60,850	70,615
00.0801	Spares and repair parts	183,379	202,217	248,717	302,318
00.9101	Total direct program	2,427,299	2,892,355	2,825,500	4,185,375
01.0101	Reimbursable program	70,033	42,000	42,000	42,000
10.0001	Total	2,497,332	2,934,355	2,867,500	4,227,375
	Financing:				
	Offsetting collections from:				
11.0001	Federal funds(-)	-1,918	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-68,115			
17.0001	Recovery of prior year obligations				
	Unobligated balance available, start of year:				
21.4002	For completion of prior year budget plans				
21.4003	Available to finance new budget plans	-27,495	-14,200		
21.4009	Reprograming from/to prior year budget plans	-14,000			
22.1001	Unobligated balance transferred to other accounts		4,200		
	Unobligated balance available, end of year:				
24.4002	For completion of prior year budget plans				
24.4003	Available to finance subsequent year budget plans	14,200			
39.0001	Budget authority	2,400,004	2,882,355	2,825,500	4,185,375
	Budget authority:				
40.0001	Appropriation	2,455,442	3,067,944	2,825,500	4,185,375
40.3601	Appropriation rescinded (unob bal)	-8,828	-10,000		
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(e)		-6,439		
41.0001	Transferred to other accounts (-)	-76,948	-169,150		
42.0001	Transferred from other accounts	30,338			
43.0001	Appropriation (adjusted)	2,400,004	2,882,355	2,825,500	4,185,375

Other Procurement, Navy
Program and Financing (in Thousands of dollars) SUMMARY

Identification code 17-1810-0-1-051		Obligations			
		1996 actual	1997 est.	1998 est.	1999 est.
	Program by activities:				
	Direct program:				
00.0101	Ships support equipment	596,593	684,724	792,152	953,019
00.0201	Communications and electronics equipment	871,323	1,097,955	899,167	1,533,267
00.0301	Aviation support equipment	176,903	238,046	177,033	240,993
00.0401	Ordnance support equipment	398,426	404,965	474,729	654,593
00.0501	Civil engineering support equipment	65,939	42,457	51,387	73,857
00.0601	Supply support equipment	100,513	77,535	61,691	110,693
00.0701	Personnel and command support equipment	193,184	29,539	60,175	65,619
00.0801	Spares and repair parts	215,400	179,567	216,931	284,702
00.9101	Total direct program	2,618,281	2,754,788	2,733,265	3,916,743
01.0101	Reimbursable program	62,124	50,930	42,000	42,000
10.0001	Total	2,680,405	2,805,718	2,775,265	3,958,743
	Financing:				
	Offsetting collections from:				
11.0001	Federal funds(-)	-4,591	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-66,891			
17.0001	Recovery of prior year obligations	-21,397			
	Unobligated balance available, start of year:				
21.4002	For completion of prior year budget plans	-673,573	-499,346	-627,983	-720,218
21.4003	Available to finance new budget plans	-27,495	-14,200		
21.4009	Reprograming from/to prior year budget plans				
22.1001	Unobligated balance transferred to other accounts		4,200		
	Unobligated balance available, end of year:				
24.4002	For completion of prior year budget plans	499,346	627,983	720,218	988,850
24.4003	Available to finance subsequent year budget plans	14,200			
39.0001	Budget authority	2,400,004	2,882,355	2,825,500	4,185,375
	Budget authority:				
40.0001	Appropriation	2,455,442	3,067,944	2,825,500	4,185,375
40.3601	Appropriation rescinded (unob bal)	-8,828	-10,000		
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(e)		-6,439		
41.0001	Transferred to other accounts (-)	-76,948	-169,150		
42.0001	Transferred from other accounts	30,338			
43.0001	Appropriation (adjusted)	2,400,004	2,882,355	2,825,500	4,185,375

Other Procurement, Navy
Program and Financing (in Thousands of dollars) SUMMARY

Identification code 17-1810-0-1-051	Obligations			
	1996 actual	1997 est.	1998 est.	1999 est.
Relation of obligations to outlays:				
71.0001 Obligations incurred	2,608,923	2,763,718	2,733,265	3,916,743
72.1001 Orders on hand, SOY	-30,569	-86,326	-86,326	-86,326
72.4001 Obligated balance, start of year	4,671,807	3,793,123	3,694,860	3,679,591
74.1001 Orders on hand, EOY	86,326	86,326	86,326	86,326
74.4001 Obligated balance, end of year	-3,793,123	-3,694,860	-3,679,591	-4,506,636
77.0001 Adjustments in expired accounts (net)	70,950			
78.0001 Adjustments in unexpired accounts	-21,397			
90.0001 Outlays (net)	3,592,917	2,861,981	2,748,534	3,089,698

Other Procurement, Navy
Object Classification (in Thousands of dollars) SUMMARY

Identification code 17-1810-0-1-051		1996 actual	1997 est.	1998 est.	1999 est.
	Direct obligations:				
125.101	Advisory and assistance services	39,841	40,866	36,534	43,623
	Purchases goods/services (inter/intra) Fed accounts				
125.303	Purchases from revolving funds	699,254	677,669	787,453	868,016
126.001	Supplies and materials	655,400	795,655	634,436	959,263
131.001	Equipment	1,223,786	1,240,598	1,274,842	2,045,841
199.001	Total Direct obligations	2,618,281	2,754,788	2,733,265	3,916,743
	Reimbursable obligations:				
225.201	Other services with the private sector	33,363			
231.001	Equipment	28,761	50,930	42,000	42,000
299.001	Total Reimbursable obligations	62,124	50,930	42,000	42,000
999.901	Total obligations	2,680,405	2,805,718	2,775,265	3,958,743

Comparison of FY 1996 Financing as reflected in FY 1997 Budget with 1996 Financing as Shown in the FY 1998 Budget

($ in Thousands)

	Financing per FY 1997 Budget	**Financing Per FY 1998 Budget**	**Increase (+) or Decrease (-)**
Program Requirements (Total)	$2,457,431	$2,497,332	+$39,901
Program Requirements (Service Account)	($2,421,431)	($2,427,299)	(+$5,868)
Program Requirements (Reimbursable)	$36,000	$70,033	+$34,033
Appropriation (Adjusted)	$2,399,131	$2,400,004	+$873

Explanation of Changes in Financing

The Fiscal Year 1996 program has changed since the presentation of the FY 1997 budget as noted below:

1. Program Requirements increased by $39,901K, $5,868K for direct service and $34,033 reflecting increased reimbursable requirements.

2. Appropriation (Adjusted). There has been a minor net increase to the appropriation of $873K reflecting transfers from other accounts for the Drug Interdiction Program.

Comparison of FY 1996 program requirements as reflected in the FY 1997 Budget with FY 1996 program requirements as shown in the FY 1998 Budget

Summary of Requirements ($ In Thousands)

	Total Program Requirements per FY 1997 Budget	**Total Program Requirements per FY 1998 Budget**	**Increase (+) or Decrease (-)**
Ship Support Equipment	$610,985	$617,796	+$6,811
Communications & Electronic Equipment	783,792	781,611	-2,181
Aviation Support Equipment	197,039	192,128	-4,911
Ordnance Support Equipment	399,451	396,264	-3,187
Civil Engineering Support Equipment	46,442	46,716	+274
Supply Support Equipment	96,277	93,966	-2,311
Personnel & Command Support Equip	96,196	115,439	+19,243
Spares & Repair Parts	191,249	183,379	-7,870
Total Fiscal Year Program	**$2,421,431**	**$2,427,299**	**+$5,868**

Explanation by Budget Activity

($ In Thousands)

1. SHIP SUPPORT EQUIPMENT (+$6,811) - Net mid-year review increases for the Acquisition Center of Excellence (ACE), Other Navigation Equipment, and Hull, Mechanical, & Electrical Items under $2 Million.

2. COMMUNICATIONS & ELECTRONIC EQUIPMENT (-$2,181) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).

3. AVIATION SUPPORT EQUIPMENT (-$4,911) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).

4. ORDNANCE SUPPORT EQUIPMENT (-$3,187) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).

5. CIVIL ENGINEERING SUPPORT (+$274) - Net minor adjustment.

6. SUPPLY SUPPORT EQUIPMENT (-$2,311) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).

7. PERSONNEL & COMMAND SUPPORT (+$19,243) - Net increase for unfunded Investment/Expense items.

8. SPARES & REPAIR PARTS (-$7,870) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).

Comparison of FY 1997 Financing as reflected in FY 1997 Budget with 1997 Financing as Shown in the FY 1998 Budget

($ In Thousands)

	Financing per FY 1997 Budget	**Financing Per FY 1998 Budget**	**Increase (+) or Decrease (-)**
Program Requirements (Total)	$2,750,195	$2,934,355	+$184,160
Program Requirements (Service Account)	(2,714,195)	($2,892,355)	(+178,160)
Program Requirements (Reimbursable)	$36,000	$42,000	+6,000
Appropriation (Adjusted)	**$2,714,195**	**$2,882,355)**	**+$168,160**

Explanation of Changes in Financing

The Fiscal Year 1996 program has changed since the presentation of the FY 1997 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of $168,160. This net change is comprised of an increase in program requirements (+$178,160), less rescissions of (-$10,000).

Comparison of FY 1997 program requirements as reflected in the FY 1997 Budget with FY 1997 program requirements as shown in the FY 1998 Budget

Summary of Requirements ($ in Thousands)

	Total Program Requirements per FY 1997 Budget	**Total Program Requirements per FY 1998 Budget**	**Increase (+) or Decrease (-)**
Ships Support Equipment	$868,175	$815,611	-$52,564
Communications and Electronic Equip	865,974	1,044,672	+178,698
Aviation Support Equipment	199,105	249,793	+50,688
Ordnance Support Equipment	464,903	468,410	+3,507
Civil Engineering Support Equip	38,057	43,943	+5,886
Supply Support Equipment	69,153	67,709	-1,444
Personnel and Command Support Equip	0	0	0
Spares and Repair Parts	208,828	202,217	-6,611
Total Fiscal Year Program	$2,714,195	$2,892,355	+$178,160

Explanation by Budget Activity
($ in Thousands)

1. Ships Support Equipment (-$52,564) - Changes reflects FY 1997 Congressional reductions (-$63,747), Congressional increases (+10,000), and below threshold reprogramming (BTR) actions (-$1,183).

2. Communications and Electronics Equipment (+$178,698) - Changes reflects FY 1997 Congressional reductions (-$28,253), Congressional increases(+$204,674), and below threshold reprogramming (BTR) actions (+$2,277).

3. Aviation Support Equipment (+$50,688) - Changes reflects FY 1997 Congressional reductions (-$8,079), Congressional increases(+$166,558), and transfers to the Air Force (-$107,791).

4.) Ordnance Support Equipment (+$3,507) - Changes reflects FY 1997 Congressional reductions (-$17,033), Congressional increases(+$22,000), and below threshold reprogramming (BTR) actions (-$1,460).

5. Civil Engineering Support Equipment (+$5,886) - Changes reflects FY 1997 Congressional reductions (-$931) and Congressional increases(+$6,817).

6. Supply Support Equipment (-$1,444) - Changes reflects FY 1997 Congressional reductions (-$1,444).

8. Spare and Repair Parts (-$6,611) - Changes reflects FY 1997 Congressional reductions (-$4,611) and below threshold reprogramming (BTR) actions (-$2,000).

CLASSIFICATION: **UNCLASSIFIED**

OPN BUDGET ITEM JUSTIFICATION SHEET					DATE: FEBRUARY 1997				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE LM2500 GAS TURBINE (81GA) (0110)				
	1996	1997	1998	1999	2000	2001	2002	2003	
QUANTITY									
COST (In Millions)	$6.3	$7.7	$7.5	$8.9	$8.7	$8.9	$9.1	$9.3	

LM2500 GAS TURBINE (81GA) (0110)

The LM2500 Marine Gas Turbine and associated Engineering Control Systems provide main propulsion for the DD 963, DDG 993, FFG 7, CG 47, DDG 51, and AOE 6 ship Classes. Procurement of improved hardware developed as a result of the Component Improvement Program (CIP) will facilitate projected MTBR growth and reduce life cycle costs. The LM2500 is composed of two major subassemblies, the gas generator and power turbine. In order to maintain the capability to provide replacement subassemblies a sufficient spare inventory of gas generators and power turbines in containers must be on hand. As new ships and differently configured LM2500 engines enter the Fleet, additional spare gas generators need to be procured in order to maintain a minimum inventory. Marine Gas Turbine Special Support Equipment (SSE) is required to provide increased depot and intermediate repair capability. Procurement of this SSE for depot repair will enable timely processing of the single shank turbine gas generator and other new configurations. Procurement of intermediate level SSE will enable repairs that would otherwise result in engine changeouts.

Unit Costs are not applicable since several items are being procured.

A. Modification Program (GA009)

1. Procurement of improved hardware for installation in LM 2500 gas generators, power turbines, and related equipment is essential to obtain the projected growth in the mean time between removals (MTBRs) and thus increase the reliability of fleet installed engines. These engines and associated control systems will provide main propulsion for the DD 963, DDG 993, FFG 7, CG 47, DDG 51, and AOE 6 Classes.

2. Failure to procure improved hardware developed as a result of the Component Improvement Program (CIP) will prevent achievement of the projected MTBR growth and significantly increase the LM 2500 life cycle costs. These costs include:

a. Increased requirements for spare gas generators, power turbines and containers

b. Increased requirements for depot repair facility special support equipment

c. Increased repair and transportation costs (as engines will need to be processed through the repair facility at an increased frequency). Inventory Objective not required. Unit cost varies.

OPN BUDGET ITEM JUSTIFICATION SHEET	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE LM 2500 GAS TURBINE (81GA) (0110)

B. Gas Generator in Container (GAO10)

1. Each LM 2500 engine is composed of two major subassemblies, the gas generator and the power turbine.

2. The Stock Rotating Spares Program is based upon a major engine subassembly procurement concept. Differences in projected removal rates of the gas generator and power turbine permit the establishment of separate spare stocking levels for each. The inventory of spare gas generators required during the support period associated with FY 96/97 Procurement is based upon:

a. Minimum quantities required to support projected peacetime operating requirements in the support period

b. Expedited handling and processing pipeline times which reflect NAVSEA actual historical experience

c. Attainment of the gas generator projected mean time between removal (MTBR)

d. Four forward prepositioning points

e. Centralized repair of removed units at one facility

f. A 90% probability of having a spare available when required at a prepositioning point

g. Current ship delivery schedule

3. LM 2500 gas generator modifications have been developed for improved reliability and increased power (upgraded). The new upgraded engine will be installed in the DDG 51 Class and AOE 6 Class. The upgraded gas generator will not be interchangeable with the current version, (installed on board, DD 963, 993 Class, and CG-47 - 54), however, the power turbines are interchangeable. As a result, spare gas generator requirements will be determined for each independently.

4.The total lead time for the procurement of these major engine subassemblies is 30 months.

5. Procurement of gas generator as stock rotating spares is required with FY 97 thru FY 03 funds to support fleet installations.

6. Normal peace time operation for installations in the ship classes is projected as : 1380 hours per engine per year for installation in the DDG 51 Class ships and 1740 hours per year for the AOE 6 class (4 installations per ship both classes). As additional operating experience is obtained, engine operating time will be continually evaluated and support requirement adjusted accordingly.

OPN BUDGET ITEM JUSTIFICATION SHEET	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIP	LM 2500 GAS TURBINE (81GA) (0110)

7. Pipeline segments and their associated realistic time projections for gas generators are: 3 days for removal and preparation for shipment: 18 days to return the unit to the designated repair point: 3 days to induct the unit into rework: 120 days for engine analysis, repair, installation of required modifications, test and preservation: 13 days to move a replacement unit to the prepositioned stocking point from the designated repair point: and 3 days for installation. The total turn-around pipeline time is 160 days for the LM 2500 gas generator

8. During the FY 96 support period, the MTBR is projected to be 25,624 hours. This projection is based on the improved reliability of the new configuration.

9. The attainment of LM 2500 gas generator recommended spare engine inventory level of 11 engines through (FY 97 procurement) is considered to represent the minimum requirement based on an evaluation of the risks associated with providing the fleet support.

10. Failure to procure the recommended gas generator classes through FY 97 would severely impact the capability to provide replacement class engines to the DDG 51 and AOE 6 ships.

GA010 - The Inventory Objective is 20. 11 units have been Procured in Prior years. 3 are included in the Budget. 5 are to be Procured in subsequent year years. Unit cost varies.

C. Engineering Control System Modifications (GAO12)

1. The Engineering Control System consists of sensors , data acquisition units, processors, and operator consoles. Peripheral devices include bell and data loggers, printers, tape readers, mass storage devices and tape recorders. These end items are comprised each of printed circuit boards, enclosures, meters, CRTs, indicators/switches, and power supplies. Inventory objectives not required. Unit cost varies for each mod kit procured.

OPN BUDGET ITEM JUSTIFICATION SHEET	**DATE: FEBRUARY 1997**
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT**	**P-1 ITEM NOMENCLATURE** **LM 2500 GAS TURBINES (81GA)**

D. SPECIAL SUPPORT EQUIPMENT (SSE) (GA014)

1. Procurement of Marine Gas Turbine SSE is required to provide increased depot repair capability to support the DD963, DDG993, FFG 7, DDG 51, AOE 6 and CG 47 class ships. This is accomplished by:

a. Increasing the capacity of the Depot Repair Point (DRP) (i.e., Increase the number of gas turbines that can be simultaneously processed) and by providing the equipment necessary to support the single shank turbine engine for the DDG 51 Class and by providing the equipment necessary to incorporate new modifications. This SSE is also necessary for repair of single shank engines on the CG 53 and out;

b. Providing the SIMAs with special support equipment necessary to alleviate engine changeouts.

2. Failure to fund this requirement would cause queuing of repairable assemblies at the DRP. This would increase the repairable pipeline, which would jeopardize the capability of providing, when required, a replacement assemble (gas generator power turbine to the fleet). Reduced operating capabilities or delays in mission essential operation would result from an inability to provide a spare assembly when required. Inventory objective not required. Unit cost varies when procuring mod kits.

PRODUCTION ENGINEERING - GA830:

The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical Manuals, signal flow diagrams, PMS, Level III production drawings, Provisioning Technical Documentation (PTD) Program Support Data (PSD) and Allowance Parts Lists (APL's) and engineering in support of final design reviews. This work can be accomplished by NAVSSES as the in service Engineering agent, other Naval activities or contractors as appropriate.

CLASSIFICATION: UNCLASSIFIED

WEAPON SYSTEMS COST ANALYSIS
EXHIBIT (P-5)

PROGRAM COST BREAKDOWN

DATE:
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD

LM2500 GAS TURBINE 81GA 0110

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	N86 SURFACE SUPPORT									
GA009	MODIFICATION PROGRAM	A		3,657		3,541		3,236		4,323
GA010	GAS GENERATOR	A			1	2,442	1	2,549	1	2,606
GA012	ENGINEERING SYSTEM MOD	A		1,924		1,055		1,153		1,400
GA014	SPECIAL SUPPORT EQUIPME	A		86		67		66		48
GA830	PRODUCTION ENGINEERING			631		629		544		529
	TOTAL			6,298		7,734		7,548		8,906

OPN BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A) | **A. DATE FEBRUARY 1997**

B. APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE
LM2500 GAS TURBINE (81GA) 0110

COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
Modification Program (GA009)										
FY 96	Adv Rel & Maint	LOE	NAVSEA	Feb-96	Feb-98		350,000	YES	NO	
FY 96	General Elec Ohio	BOA/MP	NAVSEA	Feb-96	Feb-98		3,307,000	YES	NO	
FY 97	General Elec Ohio	BOA/MP	NAVSEA	Jan-97	Jan-99		3,147,000	YES	NO	
FY 97	Adv Rel & Maint	LOE	NAVSEA	Mar-97	Mar-99		394,000	YES	NO	
FY 98	General Elec Ohio	BOA/MP	NAVSEA	Jan-98	Jan-00		3,236,000	YES	NO	
FY 99	General Elec Ohio	BOA/MP	NAVSEA	Jan-99	Jan-01		4,323,000	YES	NO	
Gas Generator in Container (GA010)										
FY97	General Elec CINN, OH	SS/BASIC	NAVSEA	Jan-97	Jan-99	1	2,442,000	YES	NO	
FY 98	General Elec CINN, OH	SS/OPTION	NAVSEA	Jan-98	Jul-00	1	2,549,000	YES	NO	
FY 99	General Elec CINN, OH	SS/OPTION	NAVSEA	Jan-99	Jan-01	1	2,606,000	YES	NO	
ELEC CONTROL SYS (GA012)										
FY 96	USIArlington, VA	LOE	NAVSEA	Feb-96	Feb-97		30,000			
FY 96	NSWC Phila, PA	WR	NAVSEA	Jan-96	Sep-96		84,000			
FY 96	NSWC Phila, PA	PO	NAVSEA	Feb-96	Dec-96		250,000	N/A	N/A	
FY 96	NSWC Phila, PA	PO	NAVSEA	Dec-95	Dec-96		320,000	N/A	N/A	
FY 96	NSWC Phila, PA	PO	NAVSEA	Mar-96	Dec-96		434,000	N/A	N/A	
FY 96	NSWC Phila, PA	WR	NAVSEA	Mar-96	Sep-96		150,000	N/A	N/A	
FY 96	NSWC Phila, PA	WR	NAVSEA	Apr-96	Sep-96		42,000	N/A	N/A	
FY 96	NSWC Phila, PA	WR	NAVSEA	Jul-96	Sep-96		25,000	N/A	N/A	
FY 96	SUPSHIP PASCAGOULA, MS	RCP/FP	NAVSEA	May-96	May-97		476,000	N/A	N/A	
FY 96	PDI Annapolis, MD	FP	NAVSEA	Mar-96	Mar-97		83,000			

D. REMARKS

***Sole Source Justification : Original Equipment Manufacturer (OEM)**

CLASSIFICATION: **UNCLASSIFIE**

OPN BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)								A. DATE FEBRUARY 1997		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA1: SHIPS SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE		LM2500 GAS TURBINE (81GA) 0110				
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
ELEC CONTROL SYS (GA012)										
FY 96	JJMA Arlington, VA	LOE	NAVSEA	Mar-96	Mar-97		30,000	N/A	N/A	
FY 97	USI Arlington, VA	LOE	NAVSEA	Jan-97	Jan-98		55,000	YES	NO	
FY 97	NSWC Philadelphia, PA	WR	NAVSEA	Jan-97	Sep-97		450,000	YES	NO	
FY 97	NSWC Philadelphia, PA	WR	NAVSEA	Jan-97	Sep-97		250,000	YES	NO	
FY 97	NSWC, Phila, PA	WR	NAVSEA	Jan-97	Sep-97		300,000	YES	NO	
FY 98	USI, Arlington, VA	LOE	NAVSEA	Jan-98	Jan-99		30,000	YES	NO	
FY 98	PDI Annapolis, MD	FP	NAVSEA	Jan-98	Jan-99		50,000	YES	NO	
FY 98	JJMA Arlington, VA	LOE	NAVSEA	Jan-98	Jan-99		400,000	YES	NO	
FY 98	NSWC, Phila, PA	WR	NAVSEA	Jan-98	Sep-98		673,000	YES	NO	
FY 99	USI Arlington, VA	LOE	NAVSEA	Jan-99	Jan-00		30,000	YES	NO	
FY 99	PDI Annapolis, MD	FP	NAVSEA	Jan-99	Jan-00		50,000	YES	NO	
FY 99	JJMA Arlington, VA	LOE	NAVSEA	Jan-99	Jan-00		350,000	YES	NO	
FY 99	LITTON GNC Woodland, CA	LOE	NAVSEA	Jan-99	Jan-00		220,000	YES	NO	
FY 99	NSWC, Phila, PA	WR	NAVSEA	Jan-99	Sep-99		750,000	YES	NO	
SPECIAL SUPPORT EQUIPMENT (GA014)										
FY 96	NAD North Island, CA.	PX	NAVSEA	Mar-96	Sep-96		86,000	N/A	N/A	
FY 97	NAD North Island, CA.	PX	NAVSEA	Jan-97	Sep-97		67,000	N/A	N/A	
FY 98	NAD North Island, CA.	PX	NAVSEA	Jan-98	Sep-98		66,000	YES	NO	
FY 99	NAD North Island, CA.	PX	NAVSEA	Jan-99	Sep-99		48,000	YES	NO	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

OPN BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)							A. DATE	FEBRUARY 1997		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA1: SHIPS SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE		LM2500 GAS TURBINE (81GA) 0110				
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
PRODUCTION ENGINEERING (GA830)										
FY 96	NSWC Phila, PA	PO	NAVSEA	Feb-96	Sep-97		566,000	N/A	N/A	
FY 96	Adv Reliability	LOE	NAVSEA	Jun-96	Jun-97		65,000	N/A	N/A	
FY 97	JJMA Arlington, VA	LOE	NAVSEA	Dec-96	Dec-97		100,000	N/A	N/A	
FY 97	ockheed Synval, CA	CPFF	NAVSEA	Dec-96	Dec-97		5,000	N/A	N/A	
FY 97	JJMA Arlington, VA	LOE	NAVSEA	Dec-96	Dec-97		419,000	N/A	N/A	
FY 97	ITTON SYS INC, CA	FF	NAVSEA	Dec-96	Dec-97		5,000	N/A	N/A	
FY 97	JJMA Arlington, VA	LOE	NAVSEA	Mar-97	Mar-98		100,000	N/A	N/A	
FY 98	NSWC Phila, PA	WR	NAVSEA	Jan-98	Sep-98		114,000	N/A	N/A	
FY 98	JJMA Arlington, VA	LOE	NAVSEA	Sep-97	Sep-98		430,000	N/A	N/A	
FY 99	NSWC Phila, PA	WR	NAVSEA	Jan-99	Sep-99		529,000	N/A	N/A	

D. REMARKS

OPN BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE Allison 501-K Gas Turbine (81GF)(0120)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$7.0	$3.4	$5.9	$6.9	$6.7	$6.8	$6.9	$7.1

ALLISON 501-K GAS TURBINE (81GF) (0120)

The 501-K Series gas turbines are used to drive electrical generators. The 501-K17 is used on the DD 963, DDG 993, and CG 47 Class ships. The 501-K34 is an upgraded version used on the DDG 51 Class ship and is not interchangeable with the 501-K17. The stock rotating spares program provides an engine as a single assembly for the replacement of a removed engine during depot repair. As new DDG 51 Class ships enter the Fleet, additional spare 501-K34 engines need to be procured in order to maintain the minimum inventory. Procurement of improved hardware is essential to maintain the MTBR goals and improve the overall reliability of the 501-K engines. Special Support Equipment (SSE) needs to be procured so that depot and intermediate level repairs can be accomplished efficiently and without interruption. This SSE will enable SIMAs to accomplish repairs to avoid engine changeouts and incorporate modifications. Depot level SSE enable establishing an organic depot for engine overhaul and also to increase capacity.
The procurement of Production Engineering technical documentation, e.g., technical manuals, PMS, Level III production drawings, etc. is essential to maintain complete life cycle support for the 501-K17/34 programs.

Unit Costs are not applicable since several items are being procured.

A. 501-K34 Stock Rotating Spares (GF001)

1. The Stock Rotating Spares Program provides an engine as a single assembly for the replacement of an engine requiring depot repair. The inventory of spare engines required during the support period is based on:
a. Minimum quantities to support projected peacetime operation of the engine
b. Expedited handling and processing pipeline times which reflect the actual historical 501-K17 experience
c. Attainment of the projected mean-time-between -removals (MTBRs)
d. Prepositioning stocking points: Seven in FY 94 through FY 97.
e. Centralized repair of removed units at one depot repair facility
f. A 90% probability of having a spare available when required at a forward prepositioning point
g. Ship delivery schedule

2. The current 501-K17 engine is being replaced by the upgraded more fuel efficient 501-K34 engine commencing with the DDG51 Class. Since the 501-K34 upgraded engine can only be replaced with another upgraded engine the two configurations must be initially spared separately and all spares procurements commencing with the FY 87 procurement have been the 501-K34 configuration.

OPN BUDGET ITEM JUSTIFICATION SHEET	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE Allison 501-K Gas Turbine (81GF) (0120)

3. Each DDG51 will have three 501-K34 installations. Each installation will drive an electrical generator. A minimum of two installations will be on the line when a ship is operating, and one installation will be operated when the ship is in-port where more electrical power and hotel steam are available or when these shore facilities are not utilized because of the short duration of the in-port period. The average level of peacetime operation for each engine installation is projected as 3,000 hours per year. During the support periods the mean-time-between-removal (MTBR) is projected to be approximately 14,000 hours. This projection is based on the current 501-K17/34 removal interval and the age distribution. The attainment of 501-K34 recommended spare engine inventory level is considered to represent the minimum requirement based on an evaluation of the risks associated with providing required fleet support.

4. Pipeline segments and their associated realistic time projections for gas generators are: 3 days for removal and preparation for shipment; 18 days to return the unit to the designated repair point; 3 days to induct the unit into rework; 58 days for engine analysis, repair, installation of required modifications, test and preservation; 13 days to move a replacement unit to the prepositioned stocking point from the designated repair point; and 3 days for installation. The total turn around pipeline time is 98 days for the 501-K Gas Turbine.

The Inventory objective is 14. 5 units have been Procured in Prior years. 2 are included in the Budget. 7 are to be Procured in subsequent years.

B. Modification Program (GF007)

1. Procurement of improved hardware for installation in the 501-K17 engine is essential to maintain, at a minimum, the 14,000 hour MTBR of the engine. Modifications are also essential for components whose failure would not necessitate engine removal, in order to increase the overall reliability of the fleet installed engines. I/O not required. Unit Cost varies.

OPN BUDGET ITEM JUSTIFICATION SHEET	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIP	P-1 ITEM NOMENCLATURE Allison 501-K Gas Turbine (81GF)(0120)

C. Special Support Equipment (GF009)

1. Procurement of Marine Gas Turbine SSE is required to provide increased SIMA and depot repair capability to support the DD, DDG, and CG class ships. SIMA support is accomplished by providing the SIMAs with special support equipment necessary to alleviate engine changeouts and also SSE equipment required to incorporate new modifications that will enhance the life expectancy of the engines. Depot support is accomplished by increasing the capacity of the Depot Repair Point (DRP) (i.e., increase the number of gas turbines that can be simultaneously processed) by providing the necessary equipment required to accomplish this task. I/O not required. Unit Cost varies procuring Mod Kits.

D. Production Engineering (NAVSSES) (GF830)

1. During the production phase of the equipment production engineering supports the review and approval of any production contract technical documentation, or the separate procurement of this documentation to include: Technical manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD) Program Support Data (PSD), Allowance Parts Lists (APL's) and Engineering in support of final design reviews. This work can be accomplished by NAVSSES as the in-service Engineering agent and other Naval activities or contractors as appropriate.

2. Carderock Division, Naval Surface Warfare Center Philadelphia provides engineering services to NAVSEA in support of the 501-K17/34 Modification Program. Support services include technical evaluation of Engineering Change Proposals (ECPs), review of the ECP maintenance engineering elements and determination of ECP impact on repair processing and supply support.

WEAPON SYSTEM COST ANALYSIS EXHIBIT
(P-5)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT E

P-1 ITEM NOMENCLATURE/SUBHEAD: Allison 501K Gas Turbine (81GF)(0120)

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	N86									
GF001	501-K34		1	1,002	1	1,002	1	1,030	1	1,053
GF007	MODIFICATION PROGRAM			4,519		2,148		4,672		5,671
GF009	SPECIAL SUPPORT EQUIP (SSE)			202		150		157		164
GF830	PRODUCTION ENG			1,323		74		38		27
	TOTAL			7,046		3,374		5,897		6,915

BUDGET PROCUREMENT HISTORY AND PLANNING P-5A									DATE FRBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE ALLISON 501-K MARINE GAS TURBINE				SUBHEAD 81GF		
COST CODE	COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	501-K34										
	Stock										
	Rotating										
GF001	Spares										
	FY 96	Allison Indianapolis,IN	*SS/OPTION	NAVSEA	Jul-96	Jan-98	1	$1,002,000	YES	NO	
	FY 97	Allison Indianapolis,IN	*SS/OPTION	NAVSEA	Dec-96	Jan-98	1	$1,002,000	YES	NO	
	FY 98	Allison Indianapolis,IN	*SS/OPTION	NAVSEA	Jan-98	Jul-99	1	1,030,000	YES	NO	
	FY 99	Allison Indianapolis,IN	*SS/OPTION	NAVSEA	Jan-99	Jul-00	1	1,053,000	YES	NO	
GF007	MOD PROGRAM										
	FY 96	NSWC Phila, PA	PO	NAVSEA	Mar-96	Mar-97		688,000	YES	NO	
	FY 96	Allison Indianapolis,IN	BOA	NAVSEA	Jul-96	Jan-98		3,681,000	YES	NO	
	FY 96	FTSCPAC SAN DIEGO, CA	WR	NAVSEA	May-96	Sep-96		30,000	YES	NO	
	FY 96	FTSCLANT SAN DIEGO, CA	WR	NAVSEA	Jul-96	Sep-96		20,000	YES	NO	
	FY 96	ADV RELIABILITY & MAINT. SCVS.	LOE	NAVSEA	Jul-96	Sep-96		80,000	YES	NO	
	FY 96	ADV RELIABILITY & MAINT. SCVS.	LOE	NAVSEA	Jun-96	Sep-96		20,000	YES	YES	
	FY 97	Allison Indianapolis,IN	BOA	NAVSEA	Feb-97	Aug-98		2,148,000	YES	NO	
	FY 98	Allison Indianapolis,IN	BOA	NAVSEA	Feb-98	Aug-99		4,672,000	YES	NO	
	FY 99	Allison Indianapolis,IN	BOA	NAVSEA	Feb-99	Aug-00		5,671,000	YES	NO	

REMARKS

* Sole Source Justification: Original Equipment Manufacturer (OEM)

BUDGET PROCUREMENT HISTORY AND PLANNING P-5A										DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE ALLISON 501-K MARINE GAS TURBINE				SUBHEAD 81GF		
COST CODE	COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
GF009	SPECIAL SPT EQPT										
	FY 96	NSWC Phila, PA	PO	NAVSEA	Jan-96	Jan-97		202,000	YES	NO	
	FY 97	NSWC Phila, PA	PO	NAVSEA	Jan-97	Jan-98		150,000	YES	NO	
	FY 98	NSWC PHILA, PA	PO	NAVSEA	Jan-98	Jan-99		157,000	YES	NO	
	FY 99	NSWC PHILA, PA	PO	NAVSEA	Jan-99	Jan-00		164,000	YES	NO	
GF830											
	FY 96	Advanced Marine Enterprise	LOE	NAVSEA	Mar-96	Mar-97		700,000	YES	NO	
	FY 96	USI	LOE	NAVSEA	Mar-96	Mar-97		475,000	YES	NO	
	FY 96	NSWC Phila, PA	WR	NAVSEA	Jan-96	Sep-96		123,000	YES	NO	
	FY 96	Adv Rel	LOE	NAVSEA	May-96	May-97		25,000	YES	NO	
	FY 97	NSWC Phila, PA	WR	NAVSEA	Jan-97	Sep-97		74,000	YES	NO	
	FY 98	NSWC PHILA, PA	WR	NAVSEA	Jan-98	Sep-98		38,000	YES	NO	
	FY 99	NSWC PHILA, PA	WR	NAVSEA	Jan-99	Sep-99		27,000	YES	NO	

REMARKS

CLASSIFICATION: **UNCLASSIFIED**

OPN BUDGET ITEM JUSTIFICATION SHEET					DATE: FEBRUARY 1997				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE STEAM PROPULSION IMPROVEMENT 81KQ/0157				
	1996	1997	1998	1999	2000	2001	2002	2003	
QUANTITY									
COST (In Millions)	$1.1	$0.2	$0.5	$0.6	$1.4	$0.3	$0.2	$0.2	

ITEM DESCRIPTION/JUSTIFICATION

The Steam Propulsion Improvement program provides for ship movement through the water and in addition provides power to ships combat and habitability systems, whether electrical or steam dependent. At any given time, due to propulsion plant casualties, ship propulsion systems may be operating at reduced capability, adversely affecting the ship's mission(s). The Steam Propulsion Improvement program encompasses steam and diesel propulsion surface ships in the fleet. Provides for material upgrades to propulsion systems resulting in increased readiness, safety and reliability. Items can be installed during a Regular Overhaul, Selected Restricted Availability, Restricted Availability by a shipyard, tender/Intermediate Maintenance Activity or Alteration Installation Team.

PROPULSION PLANT INSPECTION TOOLING - (KQ052):
The tooling currently in use by Steam Generating Plant Inspectors (SGPI) for inspection of boiler tubes is inefficient and antiquated. Funds will be utilized to procure latest technology inspection system tooling, i.e., laser-optic, ultrasonic, and electro-optic inspection systems. The inspection tooling will be placed at TYCOM designated Intermediate Maintenance Activity or Alteration Installation Team.

BOILER HYDRO STATIC TEST KITS - (KQ062):
This tooling will enable facilities/shore IMA units to leak boiler tube joints individually vice having to completely fill, hydro test, and drain boiler when trying to locate leaking tube joints. The IO is 163. 38 units have been procured in prior years. 14 kits are and electro-optic inspection systems. The inspection tooling will be placed at TYCOM designated Intermediate Maintenance included in the budget leaving 111 to be procured in subsequent years. The unit cost for this item varies.

P-1 SHOPPING LIST
ITEM NO. PAGE NO.
3 1

Classification:
UNCLASSIFIED

OPN BUDGET ITEM JUSTIFICATION SHEET	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE Steam Propulsion Improvement 81KQ/0157

HYDRAULIC EXPANSION EQUIPMENT FOR LARGER BOILER TUBES - (KQ065): Convention tube installation involves expanding the tube into a tubesheet using cage assembly containing roller pins and a tapered mandrel. Hydraulic tube installation is accomplished using uniform water pressure. Water is forced into a mandrel, which is placed into the tube hole/tube sheet at a preset pressure. A complete tube joint expansion can be done in 5-10 seconds compared to the present method of up to five minutes. There is no specific inventory objection for this project.

MACHALTS - (KQ066): The Machinery Alteration Program (MACHALT) is a program that permits changes to HM&E equipment and systems where the changes are contained within the boundaries of the individual equipment's or systems and limited systems ramifications. The MACHALT program enables changes to be accomplished in a more expeditious manner and eliminates them from the formal SHIPALT process. MACHALTs are most effective for multi-class alterations. One MACHALT can replace several SHIPALTs thereby reducing the number of SHIPALTs in the system. There is no specific Inventory Objective for this project.

PRODUCTION ENGINEERING - (KQ830): The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical manuals, PMS, Level III production drawings, Provisioning Technical documentation (PTD) Program Support Data (PSD) and Allowance Parts Lists (APL's); Engineering in support of the final design reviews. This work can be accomplished by NAVSSES as the in service Engineering agent, other Naval activities or contractors as appropriate.

LHA BOILER DESUPERHEATER - (KQ067): Because the LHA boiler desuperheater is so large, it prevents access to the boiler tubes from the water drum. A leaking boiler tube therefore requires about five days to repair, considering that a 2700 lb. flange and 2000 lb. desuperheater must be removed and replaced. The capability to quickly plug a leaking tube is vital for meeting commitments. A new desuperheater has been designed that permits access, and SHIPALT number LHA 660 has been assigned. Installation of this SHIPALT will also help resolve water drum blind flange leakage which has occurred on various LHA.

INSTALLATION OF EQUIPMENT (KQ5IN)

Funding is for installation of equipment including Fleet Modernization Program Installations, Installation of training equipment, and installation of equipment in other shore facilities.

KQDSA - DESIGN SERVICES ALLOCATION - The Budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT NAVY; BA:1 SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD: Steam Propulsion Improvement (81KQ) (0157)

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996 QTY	FY 1996 TOTAL COST	FY 1997 QTY	FY 1997 TOTAL COST	FY 1998 QTY	FY 1998 TOTAL COST	FY 1999 QTY	FY 1999 TOTAL COST
	SUBMARINE (N87)									
KQ066	MACHALT	A		135						
	SUBTOTAL N87			135						
	SURFACE SHIPS (N86)									
KQ052	PROPULSION PLANT INSPECTION							20		31
KQ062	BOILER HYDROSTATIC TEST KITS	A		33		24				
KQ830	PRODUCTION ENGINEERING	A		14		5		14		12
	SUBTOTAL N86			47		29		34		43
	AIRCRAFT CARRIERS (N88)									
KQ052	PROPULSION PLANT INSPECTION					87		70		103
KQ062	BOILER HYDROSTATIC TEST KITS	A		104						
KQ065	HYDRAULIC EXPANSION BOIP									
	LARGER BOILER TUBES			35		29		29		32
KQ830	PRODUCTION ENGINEERING	A		18		11		17		23
	SUBTOTAL N88			157		127		116		158
	EXPEDITIONARY WARFARE N85									
KQ067	BOILER LOW PROFILE									
	DESUPERHEATERS						2	391	2	391
	SUBTOTAL N85							391		391
	TOTAL EQUIPMENT			339		156		541		592
KQ5IN	INSTALLATION			754		88		0		31
KQDSA	DESIGN SERVICES ALLOCATION									5
	TOTAL INSTALLATION			754		0		0		36
	GRAND TOTAL			1,093		244		541		628

Exhibit P-5A Procurement History and Planning	BUDGET PROCUREMENT HISTORY AND PLANNING P-5A	DATE FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EUQIPMENT	P-1 ITEM NOMENCLATURE STEAM PROPULSION IMPROVEMENT	SUBHEAD 81KQ BLI: 015700

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
KQ052	PROPULSION PLANT NDE EQUIPMENT										
	FY 1997	NSWC, PHILA, PA	WR	NAVSEA	Dec-96	Sep-97		87,000	N/A	N/A	
	FY 1998	NSWC, PHILA, PA	WR	NAVSEA	Dec-97	Sep-98		90,000	N/A	N/A	
	FY 1999	NSWC, PHILA, PA	WR	NAVSEA	Dec-98	Sep-99		134,000	N/A	N/A	
KQ062	BOILER HYDROSTATIC TEST KITS										
	FY 1996	NSWC, PHILA, PA	PO	NAVSEA	Feb-96	Sep-96		137,000	YES	NO	
	FY 1997	NSWC, PHILA, PA	WR	NAVSEA	Dec-96	Sep-97		24,000	YES	NO	
KQ066	MACHALT										
	FY 1996	NSWC, PHILA, PA	WR	NAVSEA	Feb-96	Sep-96		135,000	N/A	N/A	
KQ065	HYDRALIC EXPANSION										
	FY 1996	NSWC, PHILA, PA	WR	NAVSEA	Feb-96	Sep-96		35,000	N/A	N/A	
	FY 1997	NSWC, PHILA, PA	WR	NAVSEA	Dec-96	Sep-97		29,000	N/A	N/A	
	FY 1998	NSWC, PHILA, PA	WR	NAVSEA	Dec-97	Sep-98		29,000	N/A	N/A	
	FY 1999	NSWC, PHILA, PA	WR	NAVSEA	Dec-98	Sep-99		32,000	N/A	N/A	
KQ067	BOILER LOW PROFILE DESUPERHEATER LHA										
	FY 1998	NSWC, PHILA, PA	PO	NAVSEA	Dec-97	Dec-98	2	195,500	YES	NO	
	FY 1999	NSWC, PHILA, PA	PO	NAVSEA	Dec-98	Dec-99	2	195,500	YES	NO	
KQ830	PRODUCTION ENGINEERING										
	FY 1996	NSWC, PHILA, PA	WR	NAVSEA	Dec-95	Sep-96		32,000	N/A	N/A	
	FY 1997	NSWC, PHILA, PA	WR	NAVSEA	Dec-96	Sep-97		16,000	N/A	N/A	
	FY 1998	NSWC, PHILA, PA	WR	NAVSEA	Dec-97	Sep-98		31,000	N/A	N/A	
	FY 1999	NSWC, PHILA, PA	WR	NAVSEA	Dec-98	Sep-99		35,000	N/A	N/A	

REMARKS

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: STEAM PROPULSION

MODELS OF SYSTEM AFFECTED: LHA MIDLIFE DESUPERHEATER

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT					2	0.4	2	0.4	6	1.2									10	2.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT																			0	0.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY 96 & PRIOR EQUIPMENT																			0	0.0
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT							2	0.036											2	0.036
FY99 EQUIPMENT									AP	0.028	* 2	0.02							2	0.048
FY 00 EQUIPMENT											6	0.08							6	0.080
FY01 EQUIPMENT																			0	0.00
FY 02 EQUIPMENT																			0	0.00
FY03 EQUIPMENT																				
TOTAL INSTALLATION COST		0.0		0.0		0.0	2	0.036		0.028	8	0.10		0.00		0.00		0	10	0.16
TOTAL PROCUREMENT COST		0.0		0.0		0.4		0.4		1.2		0.0		0.0		0.00		0.0		2.0
TOTAL COST		0.0		0.0		0.4		0.44		1.23		0.10		0.00		0.00		0.0		2.16

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 6 PRODUCTION LEADTIME: 12 MOS

CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Dec-97 BUDGET YEAR 2: Dec-98

PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Dec-98 BUDGET YEAR 2: Dec-99

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 98				2						2
FY 99						0 0 2 0				2
FY 00						6				6
FY 01										
FY 02										
FY 03										
TC										
										10

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 98					0 0 2 0					2
FY 99							2			2
FY 00						2	4			6
FY 01										
FY 02										
FY 03										
TC										

*** LHA 3 requires logistic leadtime due to installation planning for SASEBO Japan.**

P-3A

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: STEAM PROPULSION IMPROVEMENT

MODELS OF SYSTEM AFFECTED: FOB STANDARD L.O. SYSTEM

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.4																	0	0.4
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY 96 EQUIPMENT	1	0.5																	1	0.5
FY 97 EQUIPMENT																			0	0.0
FY 98 EQUIPMENT																			0	0.0
FY 99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY 01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY 03 EQUIPMENT																			0	0.0
TOTAL INSTALLATION COST		0.5		0.0		0		0.0		0.0		0.0		0.0				0	1	0.5
TOTAL PROCUREMENT COST		0.4		0.0		0.0		0.0		0.0		0.0		0.0				0.0		0.4
TOTAL COST		0.9		0.0		0.00		0.0		0.0		0.0		0.0				0.0		0.9

METHOD OF IMPLEMENT: ADMINISTRATIVE LEADTIME: 9 PRODUCTION LEADTIME: 12

CONTRACT DATE: PRIOR YEAR: May-89 CURRENT YEAR: BUDGET YEAR: N/A BUDGET YEAR 2: N/A

PRODUCTION DELIVER I PRIOR YEAR: May-90 CURRENT YEAR: BUDGET YEAR: N/A BUDGET YEAR 2: N/A

INSTALLATION SCHEDULE:

INPUT =======	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
FY96 & Prior	1									1

OUTPUT =====	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
FY96 & Prior	1									1

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: STEAM PROPULSION

MODELS OF SYSTEM AFFECTED: MAIN FEED PUMP L.O. SYSTEM

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.4																	0	0.4
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
																			0	0.00
FY 96 EQUIPMENT & PRIOR	1	0.3	1	0.09															2	0.39
FY 97 EQUIPMENT																			0	0.00
FY 98 EQUIPMENT																			0	0.00
FY 99 EQUIPMENT																			0	0.00
FY 00 EQUIPMENT																			0	0.00
FY 01 EQUIPMENT																			0	0.00
FY 02 EQUIPMENT																			0	0.00
FY 03 EQUIPMENT																			0	0.00
TOTAL INSTALLATION COST		0.3		0.09		0.00		0.0		0.0		0.0				0.0		0		0.39
TOTAL PROCUREMENT COST		0.4		0.0		0.0		0.0		0.0		0.0				0.0		0.0		0.40
TOTAL COST		0.7		0.09		0.00		0.0		0.0		0.0				0.0		0.0		0.79

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 9 PRODUCTION LEADTIME: 18

CONTRACT DATE: PRIOR YEAR: May-90 CURRENT YEAR: BUDGET YEAR: N/A BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Nov-91 CURRENT YEAR: BUDGET YEAR: N/A BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY96 & Prior	1	1								2

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY96 & Prior	1	1								2

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY BA 1: SHIPS SUPPORT EQUIPMENT												B. P-1 ITEM NOMENCLATURE DESUPERHEATER (LHA)								C. DATE FEBRUARY 1997				
		FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)																									
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER AIT	(P)												2							6	2					
TOTAL PHASED REQ	(C)										0	0	2	2	2	2	2	2	2	8	10					
ASSETS ON HAND	(BP)																									
DELIVERY FY & PRIOR	(P)																									
FY 98	(P)					C				2																
FY 99	(P)									C					2											
FY 00	(P)													C				6								
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
TOTAL ASSETS	(C)									2	2	2	2	4	4	4	4	10	10	10						
QTY OVER (+) OR SHORT (-)											+2	+2	+2	+2	+2	+2	+2	+2	+2	0						

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND	FY 99 & PRIOR UNDLVR	UNFUNDED
	1. APPN - OPN	10	0	0	4	6
	2. APPN - OTHER					
	3. PROCUREMENT LEADTIME 12	ADMIN 6 MOS	INITIAL ORDER 12		REORDER 12	

DD for 2447, JUN 86

P-1 SHOPPING LIST ITEM NO.- 3 PAGE NO. - 8

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								DATE FEBRUARY 1997							
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT DESUPERHEATER (LHA)							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
			FY 1999								FY 2000				
						AIT LHA-4 CL	2								
			FY 2001								FY				
		AITLHA 1 AIT LHA 2 AIT LHA 5	2 2 2	AIT LHA 3	2										

P-1 SHOPPING LIST

ITEM NO. 3 PAGE NO. 9

CLASSIFICATION: UNCLASSIFIED

CLASSIFICA UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY BA 1: SHIPS SUPPORT EQUIPMENT		B. P-1 ITEM NOMENCLATURE FOB STANDARD LUBE OIL		C. DATE FEBRUARY 1997	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	LATER
	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
ACTIVE FORCE INVENT (P)	1						
(P)							
SCHOOLS/OTHER TRA (P)							
OTHER (P)							
TOTAL PHASED REQ (C)	1						
ASSETS ON HAND (BP)	1						
DELIVERY FY PRIOR (P)							
F\ (P)							
F\ (P)							
F\ (P)							
F\ (P)							
F\ (P)							
F\ (P)							
FY (P)							
FY (P)							
FY (P)							
TOTAL ASSETS (C)	1						
QTY OVER (+) OR SHORT (-)	0						

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND	FY 99 & PRIOR UNDI	UNFUNDED
	1. APPN - OPN	1	0	1	0	0
	2. APPN - OTHER					
	3. PROCUREMENT LEA 12	ADMI 9 MOS	INITIAL OI 12		REORDER 12	

P-1 SHOPPING LIST

DD for 2447, JUN 86

ITEM NO.- 3 PAGE NO. - 10

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								DATE FEBRUARY 1997							
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT FOB STANDARD L. O. SYSTEM							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
			FY 1996								FY 1997				
AOE 3	1														
			FY 1998								FY 1999				

P-1 SHOPPING LIST
ITEM NO. 3 PAGE NO. 11

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23	A. APPROPRIATION/BUDGET ACTIVITY BA 1: SHIPS SUPPORT EQUIPMENT	B. P-1 ITEM NOMENCLATURE MAIN FEED PUMP L. O.	C. DATE FEBRUARY 1997

		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)	1					1																			
SCHOOLS/OTHER TRAINING	(P) (P)																									
OTHER	(P)																									
TOTAL PHASED REQ	(C)	1	1	1	1	1	2																			
ASSETS ON HAND	(BP)	2																								
DELIVERY FY PRIOR	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
TOTAL ASSETS	(C)	2	2	2	2	2	2																			
QTY OVER (+) OR SHORT (-)		+1	+1	+1	+1	+1	0																			

D. REMARKS	E.	RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND	FY 99 & PRIOR UNDLVR	UNFUNDED
	1. APPN -	OPN	2	0	2	0	0
	2. APPN -	OTHER					
	3. PROCUREMENT LEADTIME	18	ADMIN 9 MOS	INITIAL ORDER	12	REORDER	12

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A

DATE
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

OPN BA 1: UNREP

P-1 ITEM NOMENCLATURE/PROJECT UNIT
MAIN FEED PUMP L.O.

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
				FY 1996								FY 1997			
AOE-3	1									AOE-2	1				
				FY 1998								FY 1999			

P-1 SHOPPING LIST
ITEM NO. **PAGE NO.**
3 **13**

CLASSIFICATION:
UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **FEBRUARY 1997**

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE

OTHER PROPULSION EQUIPMENT 81GG 0180

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	$9.3	$7.8	$12.1	$6.2	$4.6	$2.4	$2.4	$2.3

ITEM DESCRIPTION/JUSTIFICATION

OTHER PROPULSION EQUIPMENT (81GG)
Other Propulsion Equipment includes: Solar MGT Modification Program (GG025) T1302S gas turbine engines used for driving electric pulse generators on MCM Class ships; Marine Diesel (GG031) engines used for propulsion and electric power generation on surface ships; Submarine Diesel (GG032) engines (Fairbanks Morse 38 Series) used to drive an emergency generator; DD 963/ DDG 993 SSS clutches (GG034); MHC Diesel Engines (CG040) used for propulsion and electrical power generation; Installation of Equipment (GG5IN) to support Fleet Modernization; MACHALTs (GG043) to permit changes to HM&E equipments; LCAC Expanded Maintenance (GG050) to repair the TF40 gas turbine engine; Production Engineering (GG830) to support technical documentation development; and MCM Diesel Engines (GG051) used for propulsion and electrical power generation. Procurement of improved hardware, including modification kits as a result of Product Improvement Programs, is essential to maintaining/increasing engine reliability. Procurement of special tooling and support equipment is needed to facilitate incorporation of modifications and permit both routine and expanded repair of equipments to improve life cycle support. The procurement of technical documentation, e.g., technical manuals, PMS, Level III production drawings, etc. is essential to maintain complete life cycle support for these engines and equipments.

SOLAR MARINE GAS TURBINES MCM; (GG024):
The funding provides the resources necessary to fully standardize engine configuration, introduce reliability/maintainability improvements and implement an effective Integrated Logistics Support (ILS) program realizing fleet mission readiness improvements and the operation of the Regional Repair Center maintenance approach.

SOLAR MGT MODIFICATION PROGRAM; (GG025):
Procurement of improved hardware for installation in T1302S engines is essential to maintain an acceptable mean-time-between-engine-removals. Modifications are essential for components whose failure would not necessitate engine removal to increase the overall reliability of the fleet installed engines onboard MCM class ships. Inventory Objective not required. Unit cost varies.

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE Other Propulsion Equipment 81GG 0180

SUBMARINE DIESEL; (GG032):
Provides for the procurement of currently available commercial engine hardware for improvement of the reliability, maintainability and durability of the Fairbanks Morse 38 series diesel engine. Of the engines utilized in subsurface ships 24.0 percent are out-of-production out-dated models which create very expensive spare/repair parts support problems. Improvements will be accomplished through procurement of special support equipment and mod kits. Inventory Objective not required. Unit cost varies.

DD 963/DDG 993 SSS CLUTCH RETROFIT; (GG034):
The DD 963/DDG 993 CL ships are to be retrofitted with the SSS Clutch. Funds are required to procure one shipset of SSS Clutches and associated material for each of the 35 ships in the DD 963 and DDG 993 Classes (K-ALTS). The Inventory Objective is 35. 24 units have been procured in prior years. 2 units are included in budget years. 9 are to be procured in subsequent years. Unit cost $954,000.

MACHALTs (GG043):
The machinery Alteration Program (MACHALT) is a program that permits changes to HM&E equipments and systems where the changes are contained within the boundaries of the individual equipments or systems and have limited system ramifications. The MACHALT program enables changes to be accomplished in a more expeditious manner and eliminate them from the formal SHIPALT process. MACHALTS are mostly for multi-class alterations. One MACHALT can replace several SHIPALTs in the system.

PRODUCTION ENGINEERING - GG830:
The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical Manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD) Program Support Data (PSD) and Allowance Parts Lists (APLs) and engineering in support of final design reviews. This work can be accomplished by NAVSSES as the in service Engineering agent, other Naval activities or contractors as appropriate.

MCM DIESEL ENGINES (GG051):
The Isotta Fraschini ID 36SS6V-AM anti-magnetic diesel engine is installed on the MCM 1 Class ships (7 per hull) for main propulsion and ships service diesel generators. Funding is required for procurement of 5 additional MCM IF diesel engines to complete the inventory objective of 24 spares. This pool of spare engines is required to support the installed population by providing replacement of failed units in the event of a casualty to maintain Fleet Readiness.

MHC DIESEL ENGINE (GG040):
The Isotta Fraschini ID 36SS8V-AM anti-magnetic diesel engine is being installed in the MHC 51 Class ships (5 per hull) for main propulsion and ships service diesel generators. It is projected that a total of 18 spare engines will be required to support the 60 installations in the 12 planned ships.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT** BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE **Other Propulsion Equipment 81GG 0180**

INSTALLATION OF EQUIPMENT; (GG5IN)
Funding is for the installation of equipment including Fleet Modernization Program installations.

GG DSA - The Budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY98 and out.

MCM/MHC DIESEL ENGINE PROGRAM (GG052):
Isotta Fraschini (I-F) diesel engines installed in MCM/MHC Class Ships have design deficiencies that significantly effect reliability, maintenance and critically undermine the Fleets ability to operate and maintain the ship as designed with reduced manning. A well conceived product improvement program focused on correcting design deficiencies and improving the Mean-Time-Between Failure to a level which provides the Navy with unparalled levels of availability for ships of this type is imperative. MCM and MHC class ships are reduced manned and will be forward deployed in greater numbers in FY 96. Critical to improving reliability and reducing maintenance requirements are implementation of engineering fixes via MACHALTS and associated engineering, ILS, spare parts support correct cooling system design deficiencies, fuel system, lube oil system, sea water corrosion, drive train, main bearings, establish configuration control, and improve spare parts sourcing/availability.

MACHINERY CONTROL SYSTEMS (GG054):
Funding is provided for Machinery Control System (MCS) to:

a) Bring the MCS under configuration control and upgrade MCM 2 - MCM 8 to the MCM 9 configuration
b) Improve operator training with the installation of an on-board trainer
c) Decrease system maintenance manhours with fault isolation capability of the on-board trainer
d) Develop MCS system upgrades to support planned changes to the main propulsion diesels
e) Re-engineering circuit card assemblies which are no longer procurable because of parts obsolescence.

The proposed MCS system changes are crucial to the continued operation of the system. Change engineering will take approximately one year to develop and va the required changes. Shipboard installation will follow the validation effort at the rate of five ships per year, completing in FY 2001.

CLASSIFICATION: UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)									DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE/SUBHEAD						
OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT			OTHER PROPULSION EQUIPMENT (81GG) 0180						
			TOTAL COST IN THOUSANDS OF DOLLARS						
COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	N85 EXPEDITIONARY WARFARE									
GG024	SOLAR MGT MOD PROGRAM	A						1,895		1,078
GG051	MCM DIESEL ENGINE	A			5	1,580				
GG052	MCM/MHC DIESEL ENGINE	A								
	PROGRAM			5,881		5,364		4,571		590
GG054	MACHINERY CONTROL SYSTEM	A						3,097		2,948
GG830	PRODUCTION ENGINEERING			350						
GG044	SSTG THROTTLE VALVES									454
	SUBTOTAL N85			6,231		6,944		9,563		5,070
	N86 SURFACE WARFARE									
GGO25	SOLAR MGT MOD PROGRAM	A				126				
GG034	SSS CLUTCH	A	1	954			2	2,099		
GG040	MHC DIESEL ENGINE	A			2	687	1	362	1	397
GG830	PRODUCTION ENGINEERING	A								227
	SUBTOTAL N86			954		813		2,461		624
	N87 SUBMARINE									
GG032	SUBMARINE DIESEL	A		313						
GG043	MACHALTS	A		321						
GG830	PRODUCTION ENGINEERING	A		245						
	SUBTOTAL N87			879		0		0		0
	EQUIPMENT TOTAL			8,064		7,757		12,024		5,694
GG5IN	INSTALLATION OF EQPT			1,282		0		45		303
GGDSA	DESIGN SERVICES ALLOCATION							8		250
	SUBTOTAL INSTALLATION			1282		0		53		553
	TOTAL			9,346		7,757		12,077		6,247

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

DATE: **FEBRUARY 1997**

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: **Other Propulsion Equipment**

SUBHEAD: (81GG) 0180

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	SOLAR MGT MOD PROGRAM										
GG025	FY 1997	UNKNOWN	CPFF	NAVSEA	Feb-97	Feb-98		126,000	YES	NO	
	SOLAR MARINE GAS TURBINES (MCM)										
GG024	FY 1998	SOLAR SAN DIEGO, CA	CPFF	NAVSEA	Jan-98	Jan-99		309,000	YES	NO	
	FY 1998	RELIANCE CLEVELAND, OH	CPFF	NAVSEA	Jan-97	Jan-98		97,000	YES	NO	
	FY 1998	NSWC PHILA, PA	WR	NAVSEA	Dec-97	Sep-98		387,000	YES	NO	
	FY 1998	NSWC PHILA, PA	WR	NAVSEA	Dec-97	Sep-98		618,000	YES	NO	
	FY 1998	NSWC PHILA, PA	WR	NAVSEA	Dec-97	Sep-98		331,000	YES	NO	
	FY 1998	NSWC PHILA, PA	WR	NAVSEA	Dec-97	Sep-98		153,000	YES	NO	
	FY 1999	SOLAR, MGMT SAN DIEGO, CA	CPFF	NAVSEA	Jan-99	Jan-00		384,000	YES	NO	
	FY 1999	NSWC PHILA, PA	WR	NAVSEA	Dec-98	Sep-99		601,000	YES	NO	
	FY 1999	RELIANCE CELVELAND, OH	CPFF	NAVSEA	Jan-99	Jan-00		93,000	YES	NO	
	SUB DIESEL SUP PROGRAM										
GG032	FY 1996	NSWC, PHILA, PA	PO	NAVSEA	Feb-96	Feb-97		313,000	YES	NO	
	DD963/DDG SSS CLUTCH RETROFIT										
GG034	FY 1996	Westinghouse	SS/FP	NAVSEA	Feb-96	Aug-97	1	954,000	YES	NO	
	FY 1998	Westinghouse	SS/FP	NAVSEA	Feb-98	Aug-99	2	1,049,500			
	MHC DIESEL										
GG040	FY 1997	ISOTTA FRASCHINI	SS/FP	NAVSEA	Dec-96	Dec-97	2	343,500	YES	NO	
	FY 1998	ISOTTA FRASCHINI	SS/FP	NAVSEA	Dec-97	Dec-98	1	362,000	YES	NO	
	FY 1999	ISOTTA FRASCHINI	SS/FP	NAVSEA	Jan-99	Jan-00	1	397,000	YES	NO	
	MACHALTS										
GG043	FY 1996	NSWC, PHILA, PA	WR	NAVSEA	Mar-96	Sep-96		321,000	YES	NO	
GG044	**SSTG THROTTLE VALVES**										
	FY 1999	SPCC MECH	RCP	NAVSEA	Apr-99	Apr-00		454,000	YES	NO	

D. REMARKS

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

DATE: **FEBRUARY 1997**

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: Other Propulsion Equipment

SUBHEAD: 81GG 0180

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	MCM DIESEL ENGINE										
GG051	**FY 1997**	**FINCANTIERI TRIESTE, ITALY**	**SS/FP**	**NAVSEA**	**Feb-97**	**Feb-98**	**5**	**316,000**	**YES**	**NO**	
	MACHINERY CONTROL SYSTEMS										
GG054	**FY 1998**	**LOCKHEED MARTIN ORLANDO, FL**	**CPFF**	**NAVSEA**	**Feb-98**	**Feb-99**		**3,097,000**	**YES**	**NO**	
	FY 1999	**LOCKHEED MARTIN ORLANDO, FL**	**CPFF**	**NAVSEA**	**Feb-99**	**Feb-00**		**2,948,000**	**YES**	**NO**	
	MCM/MHC DIESEL ENGINE PROGRAM										
GG052	**FY 1996**	**ADV REL & MAINT SCVS**	**LOE**	**NAVSEA**	**Apr-96**	**Sep-96**		**200,000**	**YES**	**NO**	
	FY 1996	**USI ARLINGTON, VA**	**LOE**	**NAVSEA**	**Apr-96**	**Sep-96**		**350,000**	**YES**	**NO**	
	FY 1996	**JJ McMULLEN**	**LOE**	**NAVSEA**	**Apr-96**	**Sep-96**		**700,000**	**YES**	**NO**	
	FY 1996	**NSWC PHILA, PA**	**PX**	**NAVSEA**	**Mar-96**	**Mar-97**		**3,660,000**	**YES**	**NO**	
	FY 1996	**USI ARLINGTON, V**	**LOE**	**NAVSEA**	**Oct-95**	**Oct-96**		**121,000**	**YES**	**NO**	
	FY 1996	**NAVSEALOGCTR,**	**WR**	**NAVSEA**	**Mar-96**	**Sep-96**		**300,000**	**YES**	**NO**	
	FY 1996	**NSWC PHILA, PA**	**WR**	**NAVSEA**	**Mar-96**	**Sep-96**		**500,000**	**YES**	**NO**	
	FY 1996	**JJ MCMULLEN**	**LOE**	**NAVSEA**	**Sep-96**	**Sep-96**		**50,000**	**YES**	**NO**	
	FY 1997	**NSWC, PHILA, PA**	**WR**	**NAVSEA**	**Nov-96**	**May-97**		**4,114,000**	**YES**	**NO**	
	FY 1997	**NSWC, PHILA, PA**	**WR**	**NAVSEA**	**Jan-97**	**Jul-97**		**1,250,000**	**YES**	**NO**	
	FY 1998	**NSWC PHILA, PA**	**WR**	**NAVSEA**	**Feb-98**	**Sep-98**		**4,571,000**	**YES**	**NO**	
	FY 1999	**NSWC PHILA, PA**	**WR**	**NAVSEA**	**Feb-99**	**Sep-99**		**590,000**	**YES**	**NO**	

D. REMARKS

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: OTHER PROPULSION

MODELS OF SYSTEM AFFECTED: SSS CLUTCH

DESCRIPTION/JUSTIFICATION: The DD 963/DDG 993 CL ships are to be retrofitted with SSS Clutch. Funds are required to procure one shipset of SSS Clutches and associated material for each of the 35 ships in t
DD 963 and DDG 993 Classes (K-ALTS).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 96 PRIOR QTY	FY 96 PRIOR	FY 97 QTY	FY 97	FY 98 QTY	FY 98	FY 99 QTY	FY 99	FY 00 QTY	FY 00	FY 01 QTY	FY 01	FY 02 QTY	FY 02	FY 03 QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY	3				2												9		14	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT ADS		3.4				2.1												11.0	0	16.5
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
																			0	0.0
FY96 & PRIOR	3	1.3																	3	1.3
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT					AP	0.5	2	0.6											2	1.1
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY 01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY 03 EQUIPMENT																			0	0.0
TO COMPLETE																	9	3.6	9	3.6
TOTAL INSTALLATION COST	3	1.3			AP	0.5	2	0.6			0	0.0	0.0		0.0		9	3.6	14	6.0
TOTAL PROCUREMENT COST		3.4		0.0		2.1		0.0		0.0		0.0			0.0			11.0		16.5
TOTAL COST		4.7		0.00		2.6		0.60		0.0		0.0			0.0			14.6		22.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 PRODUCTION LEADTIME 18 MONTHS

CONTRACT DATE: PRIOR YEAR: ##### CURRENT YEAR: BUDGET YEA Feb-98 BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: ##### CURRENT YEAR: BUDGET YEA Aug-99 BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR	2	1								3
FY 97										0
FY 98				1 1						2
FY 99										0
FY 00										0
FY 01										0
FY 02										0
FY 03										0
TC									9	9
										14

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR		2	1							3
FY 97										0
FY 98					1 1					2
FY 99										0
FY 00										0
FY 01										0
FY 02										0
FY 03										0
TC									9	9
										14

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT												B. P-1 ITEM NOMENCLATURE GG034/SSS CLUTCH								C. DATE FEBRUARY 1997				
		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)				1				1							1										
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER AIT	(P)				1												1									
TOTAL PHASED REQ	(C)				2	2	2	2	3	3	3	3	3	3	3	4	5									
ASSETS ON HAND	(BP)	2																								
DELIVERY FY 96 & PRIOR	(P)		C						1																	
FY 97	(P)																									
FY 98	(P)										C						2									
FY 99	(P)																									
FY 00	(P)																									
FY 01	(P)																									
FY 02	(P)																									
FY 03	(P)																									
TOTAL ASSETS	(C)	2	2	2	2	2	2	2	3	3	3	3	3	3	5	3	5									
QTY OVER (+) OR SHORT (-)		2	2	2	0	0	0	0	0	0	0	0	0	0	0	-1	0									

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND	FY 97 & PRIOR UNDLVR	UNFUNDED
		35	21	2	3	9
	1. APPN - OPN					
	2. APPN - OTHER					
	3. PROCUREMENT LEADTIME 12	ADMIN 6 MONTHS	INITIAL ORDER 18 MON		REORDER 4	

DD for 2447, JUN 86

P-1 SHOPPING LIST ITEM NO.- 4 PAGE NO. - 8

CLASSIFICATION **UNCLASSIFIED**

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT SSS CLUTCHES/GG034							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1996								FY 1997							
						DD 967 DD 963 AIT	1 1							DD 993	1
FY 1999								FY							
				DD 978	1	DD 971 AIT	1								

P-1 SHOPPING LIST
ITEM NO. 4 PAGE NO. 9

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B

DATE **FEBRUARY 1997**

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE

Other Propulsion Equipment 81GG 0180

ITEM/PROJECT UNIT	TOTAL I0 / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE		QUANTITY DUE IN WITH FY 96 * PRIOR FUNDS	PLANNED BUDGET YEARS 97/98/99 PROCUREMENT	BALANCE	PHASING RATIONALE
GG040, MHC Diesel Engine	18	0	0		6	2/1/1	8	Priority Constraint
GG051, MCM Diesel Engine	29	0	18		6	5/0/0	0	Priority Constraint

MEMO ENTRIES

D. REMARKS

ITEM GG040: Inventory Objective of 18 required for support of the MHC 51 Class ships.

ITEM GG051: Inventory Objective of 24 required for support of the MCM-1 Class ships.

0

P-1 SHOPPING LIST

ITEM NO. **PAGE NO.**

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CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE OTHER GENERATORS (81G6) (0260)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$5.0	$0.0	$1.8	$9.2	$2.3	$2.6	0.0	0.0

SHIP ALTERATIONS: To replace obsolete, unsupportable and in some cases, underpowered equipment now in use. This program is applicable to all ship types. Installation agents and types of availabilities required vary with ship and equipment type. This is a continuing program composed of both maintenance items and newly developed improvements.

G65IN - EQUIPMENT INSTALLATION - Funding for the installation of equipment including fleet modernization program installations. Funding for the installation of Joint Fleet Priority #20C Solid Frequency Converter.

GG DSA - The Budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 & out.

G6023 - MACHALTs - The Machinery Alteration Program (MACHALT) is a program that permits changes to Other Generator equipment and systems where the changes are contained within the boundaries of the individual equipment's or systems and have limited system ramifications. The MACHALT program enables change to be accomplished in a more expeditious manner and eliminates candidates from the formal SHIPALT process. MACHALTs are most effective for multi-class alterations. One MACHALT can replace several SHIPALTs in the system No I/O required.

G6024 - LHA MID LIFE - This program supports material procurement and installation of engineering solutions developed as part of the LHA Mid-Life Maintenance Upgrade Program (Joint Fleet Priority #20C assigned by OPNAV, NAVSEA, Type Commanders LHA Midlife Management Team. Procure and Install Solid State Frequency changers). This program is a joint OPNAV, CINCLANTFLT, and SURFPAC inactive to resolve maintenance deficiencies increase readiness, and reduce future maintenance costs enabling the ships to reach their service life.

G6035 COMMAND & CONTROL UPGRADE - The Navy has four flagships or command ships: one for each of the three numbered fleets and one for the Middle East Forces in the Persian Gulf. These ships serve as headquarters for the numbered fleet commanders and provide extensive communications, support and berthing for embarked staff. Their mission is to provide command and control centers.

Commander, Second Fleet	**USS MOUNT WHITNEY (LCC 20)**
Commander, Third Fleet	**USS CORONADO (AGF 11)**
Commander, Sixth Fleet	**USS LASALLE (AGF 3)**
Commander, Seventh Fleet	**USS BLUE RIDGE (LCC 19)**

G6DSA DESIGN SERVICES ALLOCATION - Design Agent transferred from O&M,N and out.

CLASSIFICATION: **UNCLASSIFIED**

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD: 81G6 OTHER GENERATORS (0260)

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
G6024	LHA Mid Life Upgrade (Solid State Frequency Changer)								15	6,177
	SUBTOTAL N85									6,177
G6035	Command & Control Upgrade						2	1,810		
	SUBTOTAL N86							1,810		6,177
	TOTAL EQUIPMENT							1,810		6,177
G6DSA	DESIGN SERVICES ALLOCATION									600
G65IN	Installation of Equipment	4,996								2,456
	TOTAL INSTALLATION	4,996								3,056
	GRAND TOTAL							1,810		9,233

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE OTHER GENERATORS				SUBHEAD 81G6/0260		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
GG024	SOLID STATE FREQUENCY CHANGERS FY 1999	UNKNOWN	C/FP/OPT	NAVSEA	Jan-99	Jan-00	15	411,800	YES		
G6035	COMMAND AND CONTROL UPGRADE FY 1998	NSY NORFOLK, VA	RC	NAVSEA	Jun-98	Jun-99	2	905,000	YES		
REMARKS											

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: OTHER GENERATORS

MODELS OF SYSTEM AFFECTED: ARC FAULT DETECTORS

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.8																	0	0.8
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT	2	1.1																	2	1.1
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
																			0	0.0
TO COMPLETE																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST	2	1.1	0	0.0		0		0		0		0				0		0	2	1.1
TOTAL PROCUREMENT COST	0.0	0.8		0.0		0.0		0.0		0.0		0.0				0.0		0.0		0.8
TOTAL COST	0.0	1.9		0.0		0.0		0.0		0.0		0.0				0.0		0.0		1.9

METHOD OF IMPLEMENTATION: AIT/SS ADMINISTRATIVE LEADTIME: 21 PRODUCTION LEADTIME: 12

CONTRACT DATE: PRIOR YEAR: Mar-94 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Mar-95 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 AND PRIOR	1 1									2

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 AND PRIOR	1 1									2

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: OTHER GENERATORS

MODELS OF SYSTEM AFFECTED: 60/400 HZ STATIC FREQUENCY CONVERTERS

DESCRIPTION/JUSTIFICATION: The water cooled 400 HZ static frequency converters has completed a critical design review which provided changes to improve reliability of this equipment. It was determined that the principal remaining concern was the potential deterioration of the imbedded water cooling system. The most cost effective fix for this problem is to convert the unit to air cooling. This requirement directed by the senior Navy Steering Board.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.0
QUANTITY																			0	
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.4																	0	1.4
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	2	0.9																	2	0.9
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY 03 EQUIPMENT																			0	0.0
TC																			0	0.0
TOTAL INSTALLATION COST	2	0.9		0.0		0.0	0	0.0		0.0		0	0	0		0		0	2	0.9
TOTAL PROCUREMENT COST				0.0		0.0		0.0		0.0		0.0				0.0		0.0	2	1.4
TOTAL COST		0.9		0.0		0.0		0.0		0.0		0.0				0.0		0.0		2.3

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 21 PRODUCTION LEADTIME: 12

CONTRACT DATE: PRIOR YEAR: Jan-94 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2: 0

PRODUCTION DELIVER DATE: PRIOR YEAR: Jan 95 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2: 0

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
*FY 96 & PRIOR	0 0 1 1									2

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
*FY 96 & PRIOR		1 1								2

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: OTHER GENERATORS

MODELS OF SYSTEM AFFECTED: LHA MID LIFE

DESCRIPTION/JUSTIFICATION: SOLID FREQUENCY CHANGERS PRIORITY #20C

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 96 QTY	FY 96 & PRIOR	FY 97 QTY	FY 97	FY 98 QTY	FY 98	FY 99 QTY	FY 99	FY 00 QTY	FY 00	FY 01 QTY	FY 01	FY 02 QTY	FY 02	FY 03 QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT							15												15	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING								6.2											0	6.2
EQUIPMENT																			0	0.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
																			0	0.0
FY96 EQUIPMENT & PRIOR																			0	0.0
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY00 EQUIPMENT									3	2.2	12	2.5							15	4.7
FY 01 EQUIPMENT																			0	0.0
FY02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																				0.0
TOTAL INSTALLATION COST	0	0.0		0.0		0.0		0.0	3	2.2	12	2.5	0	0.0	0	0.0	0	15		4.7
TOTAL PROCUREMENT COST	0.0	0.0		0.0		0.0		6.2		0.0		0.0		0.0		0.0	0.0	0		6.2
TOTAL COST	0.0	0.0		0.0		0.0		6.2		2.2		2.5		0.0		0.0	0.0	15		10.9

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 9 PRODUCTION LEADTIME: 12

CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2: Jan-99

PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2: Jan-00

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR										0
FY 97										0
FY 98					3	9 3				15
FY 99										0
FY 00										0
FY 01										0
FY 02										0
FY 03										0
TC										15

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR										0
FY 97										0
FY 98					3		3 6 0 3			15
FY 99										0
FY 00										0
FY 01										0
FY 02										0
FY 03										0
TC										15

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: OTHER GENERATORS
MODELS OF SYSTEM AFFECTED: SEOC MOD AIT
DESCRIPTION/JUSTIFICATION:
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT	2	0																	2	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.0																	0	1.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 & PRIOR EQUIPMENT	2	2.9																	2	2.9
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
																			0	0.0
TO COMPLETE																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST	2	2.9	0	0.0		0		0		0		0				0		0	2	2.9
TOTAL PROCUREMENT COST	0.0	1.0		0.0		0.0		0.0		0.0		0.0				0.0		0.0		1.0
TOTAL COST	0.0	3.9		0.0		0.0		0.0		0.0		0.0				0.0		0.0		3.9

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME 9 — PRODUCTION LEADTIME: 12

CONTRACT DATE: — PRIOR YEAR: Mar-94 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: — PRIOR YEAR: Mar-95 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 AND PRIOR	2									2

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 AND PRIOR	2									2

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: COMMAND & CONTROL UPGRADE

MODELS OF SYSTEM AFFECTED: 1000KW GENERATORS AIT

DESCRIPTION/JUSTIFICATION: Required dedicated power for I. Also relieves shortage of available power.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT						1.8													0	1.8
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT																			0	0.0
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT							2	3.1											2	3.1
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
																			0	0.0
TO COMPLETE																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST	0	0.0	0	0.0	0	0	2	3.1	0		0					0	0	0	2	3.1
TOTAL PROCUREMENT COST		0.0		0.0		1.8		0.0		0.0		0.0				0.0		0.0	2	1.8
TOTAL COST		0.0		0.0		1.8		3.1		0.0		0.0				0.0		0.0		4.9

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 9 PRODUCTION LEADTIME: 12

CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: N/A BUDGET YEAR: June-98 BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: June-99 BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR										0
FY 97										0
FY 98				2						2
FY 99										0
FY 00										0
FY 01										0
FY 02										0
FY 03										0
TC										2

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR										0
FY 97										0
FY 98				2						2
FY 99										0
FY 00										0
FY 01										0
FY 02										0
FY 03										0
TC										2

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE Other Pumps (81GP)(0320)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$0.8	$0.1	0.4	$4.1	$0.8	$1.1	$2.0	$1.1

OTHER PUMPS -

Purchases various machinery pumps used in shipboard fluid systems such as firemain, fuel oil, potable water, lube oil, waste and drain.

MACHALTS - GP211
The Machinery Alteration Program (MACHALT) is a program that permits changes to HM&E equipment and systems where the changes are contained within the boundaries of the individual equipments or systems and have limited system ramifications. The MACHALT program enables changes to be accomplished in a more expeditious manner and eliminated them from the formal SHIPALT process. MACHALTS are mostly for multi-class alterations.

PRODUCTION ENGINEERING - GP830
The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical Manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD), Program Support Data (PSD) and Allowance Parts Lists (APL's); Engineering in support of final design reviews. This work can be accomplished by NAVSSES as the In Service Engineering Agent, other Naval activities or contractors as appropriate.

EQUIPMENT INSTALLATION - (GP5IN)
Funding is for the installation of equipment including Fleet Modernization Program Installation, installation of training equipment and installation of equipment in other shore facilities.

GPDSA - The Budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 & out.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE Other Pumps (81GP)

GP213 FLUID SYSTEM

Fluid Systems on board navy surface ships and submarines consist of any distributed piping system carrying freshwater, saltwater, steam, fuel, lube oil or air and all of the ancillary hardware that supports the system, such as pumps, pipe hangers, turbines, motors, etc. These systems suffer abuse and degradation by virtue of the operating conditions within the conduit, (ie Piping), and the equipment transporting the fluid. The maintenance and upkeep of these systems and associated support equipment are the biggest life cycle cost drivers for HM&E equipment in the operating navy. Proper investigation and utilization of commercially available state of the art technology can drastically reduce maintenance costs, extend the operating life of the equipment and increases the operational availability and reliability of the equipment.

GP212 LHA MIDLIFE UPGRADE (FIRE PUMPS)

This program supports material procurement and installation of engineering solutions developed as part of the LHA Mid-Life Maintenance Upgrade Program. This program is a joint OPNAV, CINCLANFLT, SURFLANT, CINCPACFLT, AND SURFPAC initiative to resolve maintenance deficiencies, increase readiness and reduce future maintenance costs enabling the ships to reach their service life. Joint Fleet Priority # 600 as assigned by OPNAV; NAVSEA; TYPE COMMANDERS and LHA Mid Life Management team, will procure and install GPR Fire Pumps.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)									DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT			P-1 ITEM NOMENCLATURE/SUBHEAD OTHER PUMPS (81GP)						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS						
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	N87 SUBMARINES									
GP211	MACHALT	A		499						
GP830	PRODUCTION ENGINEERING	A		349						
	SUBTOTAL N87			848						
	N85 EXPEDITIONARY WARFARE									
GP212	LHA MIDLIFE GPM FIRE PUMPS	A			1	128	1	153	1	151
GP213	FLUID SYSTEMS IMPROVEMENT	A								334
GP 214	PUMP ROTATABLES	A								3,335
	SUBTOTAL N85					128		153		3,820
	TOTAL EQUIPMENT			848		128		153		3,820
GP5IN	INSTALLATION OF EQUIPMENT							247		252
GPDSA	DESIGN SERVICES ALLOCATION							44		41
	TOTAL INSTALLATION			0		0		291		293
	GRAND TOTAL			848		128		444		4,113

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

P-5A

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: OTHER PUMPS

SUBHEAD: 81GP/0320

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
GP211	MACHALT										
	FY 1996	NSWC PHILA, PA	WX	NAVSEA	Jan-96	Sep-97		499,000			
GP212	LHA MID-LIFE GPM FIRE PUMP										
	FY 1997	UNKNOWN	RCP	NSWC PHILA	May-97	Nov-98	1	128,000	YES	NO	
	FY 1998	UNKNOWN	RCP	NSWC PHILA	May-98	Nov-99	1	153,000	YES	NO	
	FY 1999	UNKNOWN	RCP	NSWC PHILA	May-99	Nov-00	1	151,000	YES	NO	
GP213	FLUID SYSTEMS										
	FY 1999	NSWC PHILA, PA	WR	NSWC PHILA	Oct-98	Sep-99		334,000			
GP214	PUMP ROTATABLES										
	FY 1999	PERA NORFOLK	PX	NAVSEA	Jan-99	Sep-99		3,335,000			

REMARKS

CLASSIFICATION: FEBRUARY 1997

P3A INDIVIDUAL MODIFICATION

MODIFICATION TITLE: LHA MID-LIFE UPGRADE

MODELS OF SYSTEM AFFECTED: 2000 GPM FIRE PUMP

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY			1		1		1		2										5	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT				0.1		0.2		0.2		0.3									0	0.8
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
																			0	0.0
FY96 & PRIOR EQUIPMENT																			0	0.0
FY97 EQUIPMENT					1	0.3													1	0.3
FY98 EQUIPMENT							1	0.3											1	0.3
FY99 EQUIPMENT									AP	0.2	1	0.2							1	0.4
FY00 EQUIPMENT											2	0.5							2	0.5
FY01 EQUIPMENT																			0	0.0
FY02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST				0	1	0.3	1	0.3	AP	0.2	3	0.7							5	1.5
TOTAL PROCUREMENT COST				0.1		0.2		0.2		0.3		0.0								0.8
TOTAL COST				0.1		0.5		0.5		0.5		0.7				0				2.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 9 MONTHS PRODUCTION LEADTIME: 18 Months

CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: May-97 BUDGET YEAR: May-98 BUDGET YEAR 2: May-99

PRODUCTION DELIVER DAT PRIOR YEAR: CURRENT YEAR: N0v-98 BUDGET YEAR: N0V-99 BUDGET YEAR 2: Nov-00

INSTALLATION SCHEDULE:

	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4		TC 1, 2, 3, 4	TOTAL
FY 97			1								1
FY 98				1							1
FY 99						0 0 1 0					1
FY 00						2					2
											5

	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4,		TC 1, 2, 3, 4	TOTAL
FY 97				1							1
FY 98					1						1
FY 99							1				1
FY00							2				2
											5

P-3A

ITEM 6 PAGE 5

*2000 GPM FIRE PUMPS FOR LHD1 CLAS SHIPS

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN BA 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUBMARINE PROPELLERS 81GQ (0510)

	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY	0	1	1	1	0	0	0	0
COST (In Millions)	$0.0	$36.4	$0.0	$13.3	$26.5	$0.0	$0.0	$0.0

ITEM DESCRIPTION/JUSTIFICATION

GQ012 SSN21 PROPULSOR - Quantity represents one complete propulsor spare and one additional rotor assembly. Based on experience gained from other submarine classes, there will be failures of critical propulsor components. The SEAWOLF unique propulsor major subassemblies procured with OPN funds will be available in the event of equipment failure which cannot be fixed through piece part repair. The SEAWOLF propulsor is a new complex design with operational failure experience factors based on equivalent failures in the fleet. There are no spares or assets to draw from in the event of a failure. Maintaining critical propulsor components will not only improve the operational availability of the class but without spares, propulsor components refurbishment together with the procurement lead-times would significantly decrease the affected ship's operational availability.
In order to minimize any ship delay, sufficient spares of the latest model propellers must be procured and placed in storage to be available for timely changeout. All items included in this P-1 Line can be installed during a dry-dock, Restricted Availability or Regular Overhaul availability.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN BA 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUBMARINE PROPELLERS 81GQ (0510)

ITEM DESCRIPTION/JUSTIFICATION

The inventory objective (IO) for propellers is a numerical quantity referred to as the "Maintenance Stock Objective" (MSO) which is established for each propeller after considering:
(1) the average annual demand
(2) repair lead time
(3) safety level or the quantity required to be on hand to support unpredictable fluctuations in demand or delays in the normal refit cycle
(4) transportability considerations, and
(5)Type Commanders annual review and recommendations.
For ships entering the fleet from the shipbuilding programs, the I.O.'s annual demand is based upon experience with similar type propellers for which supply/demand experience has been gained.

CLASSIFICATION: **UNCLASSIFIED**

PROGRAM COST BREAKDOWN
P-5

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OPN BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD: SUBMARINE PROPELLERS/ (81GQ) 0510

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	SUBMARINES (N87)									
GQ012	SSN 21 PROPULSOR	A								
	PROPULSOR ROTATING ASSEMBLY			0	1	10,848		0	1	13,336
	PROPULSOR AFT FIXED ASSEMBLY			0	1	25,557		0		0
	PROPULSOR FWD FIXED ASSEMBLY			0		0	1	0		0
	TOTALS			0		36,405		0		13,336

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING
P-5A

DATE: **FEBRUARY 1997**

APPROPRIATION/BUDGET ACTIVITY: **OPN BA 1: SHIPS SUPPORT EQUIPMENT**

P-1 ITEM NOMENCLATURE: **SUBMARINE PROPELLERS**

SUBHEAD: **81GQ**

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	SUBMARINES (N87)										
	FY97										
GQ012	PROPULSOR ROTATING ASSY	NSY PHILA	N/A	NAVSEA	1/97	6/99	1	10,848	YES	NO	
GQ012	PROPULSOR AFT FIXED ASSY	TBD	FPI	NAVSEA	3/97	10/99	1	25,557	YES	NO	
	FY99										
GQ012	PROPULSOR ROTATING ASSY	NSY PHILA	N/A	NAVSEA	1/99	6/01	1	13,336	YES	NO	
									YES	NO	

REMARKS

Exhibit P-20, Requirements Study **Propulsor Rotating Assembly**	Approp (Treas) Code/CC/BA/BSA/Item Control No **1810-BA-1**					Date **February 1997**		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 30 months		
Submarine Propellers	PY FY96	CY FY97	BY1 FY98	BY2 FY99	BY2+1 FY00	BY2+2 FY01	BY2+3 FY02	BY2+4 FY03
Buy Summary	0	1	0	1	0	0	0	0
Unit Cost	0	10848.0	0	13336.0	0	0	0	0
Total Cost	0	10848.0	0	13336.0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	1	1	2	2
Deliveries from all prior year funding								
Deliveries from CY funding				1				
Deliveries from BY1 funding					0			
Deliveries from BY2 funding						1		
Deliveries from subsequent years' funding							0	0
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	1	1	2	2	2
Inventory Objective or Current Authorized Allowance								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 7-5

Exhibit P-20, Requirements Study **Propulsor Aft Fixed Assembly**	Approp (Treas) Code/CC/BA/BSA/Item Control No **1810-BA-1**					Date **February 1997**		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 36 months		
Submarine Propellers	PY FY96	CY FY97	BY1 FY98	BY2 FY99	BY2+1 FY00	BY2+2 FY01	BY2+3 FY02	BY2+4 FY03
Buy Summary	0	1	0	0	0	0	0	0
Unit Cost	0	25557.0	0	0	0	0	0	0
Total Cost	0	25557.0	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	0	1	1	1
Deliveries from all prior year funding								
Deliveries from CY funding					1			
Deliveries from BY1 funding						0	0	0
Deliveries from BY2 funding						0	0	0
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	0	1	1	1	1
Inventory Objective or Current Authorized Allowance								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 7-6

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY HER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE OTHER PROPELLERS AND SHAFTS 81GR 0540			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	$1.5	$2.8	$1.5	$2.9	$1.6	$1.5	$1.5	$1.6

PROPELLERS AND SHAFTS

This Line Item supports all "S" cognizance Ships Propellers and Shafts which are not listed as separate P-1 Items. A ship's operating ability is directly related to the condition of its propellers and shafts. A malfunctioning propeller or shaft can result in excessive vibration, noise, loss of speed or possible loss of motion. In addition, these items are susceptible to damage, have long repair lead time, and due to their increased size and weight, are becoming more difficult to transport. As a result of these conditions, it is mandatory to store propellers/shafts at sufficient locations to avoid delaying ship's deployments. It should be noted that in addition to new propellers and shafts required to support active fleet ships, planning for spares to support ship classes still under construction such as CG-47 and AOE-6 and new ship classes being introduced such as DDG 51, must be accommodated with this P-1 line item. These propellers and shafts can be installed during drydocking, Selected Restricted Availability or Regular Overhaul and in the event of a casualty, propellers can be waterborne installed alongside a tender.

The Inventory Objective (I.O.) for propellers and shafts is a numerical quantity referred to as the "Maintenance Stock Objective" (MSO). The MSO is a numerical quantity established for each propeller and shaft after considering: (1) the average annual demand, (2) Repair lead time, (3) safety level or the quantity required to be on hand to support unpredictable fluctuations in demand or delays in the normal refit cycle, (4) transportability considerations, and (5) Type Commanders review and recommendations. For ships entering the Fleet from the shipbuilding programs, the I.O.'s annual demand is based upon experience with similar type propellers and shafts for which supply/demand experience has been gained.

P-1 SHOPPING LIST
ITEM NO. 8 PAGE NO. 1

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY B SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE OTHER PROPELLERS AND SHAFTS/81GR 0540

INTERMEDIATE SHAFT CG-47 CL; (GR022)

The Maintenance Stock Objective (MSO) for Intermediate Shaft CG-47 CL is 4. 1 in use in active fleet. 1 unit has been procured in prior years. 2 are included in the budget years. Unit Cost is estimated at $215K.

BLADE SET, PORT/STDB DDG-51 CL; (GR044)

The Maintenance Stock Objective (MSO) for Blade Set, Port/STBD DDG 51 CL is 11 to support the DDG 51 CL ships. One Shipset is being procured by SCN. The other 10 are required to complete the MSO. The inventory objective is 11. 1 unit has been procured in Prior years. 4 are included in the Budget years. 5 are to be procured in subsequent years. Unit cost is estimated at $539K.

HUB SET PORT/STBD DDG-51 CL; (GR045)

The Maintenance Stock Objective (MSO) for DDG-51 CL Hub Sets is 9 to support the DDG-51 CL ships. One shipset is being procured by SCN. Inventory objective is 9 which are required to complete the MSO. 1 is included in budget year. 7 are to be procured in subsequent years. Unit Cost is estimated at $707K.

PROP SHAFT DDG-51 CL; (GR046)

The maintenance Stock Objective for Prop Shaft DDG-51 CL is 12 to support DDG-51 CL ships. Two shipsets are being procured by SCN. Inventory Objective is 12 which are required to complete MSO. 1 is included in budget year. 9 are to be procured in subsequent years. Unit cost is estimated at $394K.

SSN 688 IPMP SHAFT (GR055)

The Main Propulsion Propeller Shaft for the four SSN 688 Class ships being built with the Improved Performance Machinery Propulsion (IPMP) system is a different configuration and is not interchangeable with the standard SSN 688 Class propeller shaft. The inventory objective is 2. 1 unit has been procured in prior years. 1 unit to be included in the Budget year. 0 to be procured in subsequent years. Unit costs $631,000.

OD BOXES PORT/STBD CG-47 CL (GR060)

The Maintenance Stock Objective (MSO) for OD Boxes, Port/STBD CG-47 (GR060) is 4. 1 unit has been procured in prior years. 1 unit to be included in the budget years. 2 units to be procured in subsequent years. Unit Cost is estimated at 254,000.

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMEN	P-1 ITEM NOMENCLATURE OTHER PROPELLERS AND SHAFTS 81GR 0540

PROPELLERS, AOE-6 CL (GR056); (INTERMEDIATE SHAFT PORT, AOE 6 CL (GR061) AND INTERMEDIATE SHAFT STBD, AOE 6 CL (GR062)

The AOE 6 Class propeller is the largest propeller in U.S. Navy service and can be only transported via water vice over the road or by the air. Accordingly, spare propellers should be positioned on the East and West coasts and in WESTPAC to preclude lengthy ship down-time if propeller replacement is required and the spare propeller must be shipped via water from one coast to the other or to WESTPAC. One shipset each of spare propellers and the propeller shafts have been funded by the shipbuilding program with SCN funds. The following items and quantities remain to be procured to meet the Inventory Objective for support of the Class ; Propeller shipsets - 1; Intermediate Shaft shipset - 2; Stern Tube Shaft shipset - 2. Originally, it was planned to procure the AOE 6 CL propellers from commercial sources. However, due to the decrease in submarine propeller manufacturing requirements, caused primarily by the significant reduction in the planned number of SEAWOLF Class submarines to be built, the AOE 6 CL propellers will be manufactured by the Propeller Center at the Philadelphia Naval Shipyard (PNSY). The PNSY propeller Center and Foundary were found to be core logistic facilities within the meaning of 10 U.S.C. 2464. Workload at the PNSY Propeller Center is currently below capacity and will continue to diminish due to the decreased submarine propeller manufacturing requirements.

To maintain the PNSY Propeller manufacturing facility, future procurements of selected surface ship monobloc propellers and controllable pitch propeller blades will be directed to the Propeller Center.

HUB SET PORT/STBD CG-66-73 (GR066)

The Hubs installed on CG 66-73 are a different configuration from the prior ships of the CG 47 class. The maintenance stock objective is two to support the 8 ships. No units have been procured in prior years. One set will be procured in the budget years with the remaining set planned for FY 2001. Unit cost is estimated at $657K.

GR067 SHAFTING ROTATABLES

LHA 1 Class Mid-Life Maintenance Program identified a maintenance problem directly related to excessive turn-around time for repair of certain equipments. This resulted in decreased system readiness and decreased ship operational availability. For ships in depot availabilities, these delays resulted in increased overall maintenance costs. The cost effective solution is procurement of selected equipments for use in a rotatable pool, which will decrease system repair time, reduce overall maintenance costs and improve ship operational availability.

GR830 PRODUCTION ENGINEERING

The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD) Program Support Data (PSD) and Allowance Parts Lists (APL's) Engineering in support of final design reviews. This work can be accomplished by NAVSSES as the in service Engineering agent, other Naval Activities or contractors as appropriate.

WEAPON SYSTEM COST ANALYSIS
EXHIBIT (P-5) PROGRAM COST BREAKDOWN

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD: OTHER PROPELLERS AND SHAFTS (81GR) 0540

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	SUBMARINES N87									
GR055	SSN 688 IPMP Shaft	A			1	631				
	SUBTOTAL N87					631				
	SURFACE SHIPS N85/N86									
GR022	Intermediate Shaft, CG- 47 CL	A			2	430				
GR044	Blade Set Port/STBD, DDG-51 CL	A			2	1078	2	1102		
GR045	Hub Set Port/STBD, DDG-51 CL	A							1	707
GR046	Prop Shaft DDG-51 CL	A					1	394		
GR056	Propellers, AOE--6 CL	A	2	1185						
GR060	OD Boxes, Port/Stbd CG-47 CL	A			1	254				
GR061	Intermediate Shaft, Port AOE-6 CL	A	1	174					1	223
GR062	Intermediate Shaft, STBD, AOE-6 CL	A			2	348				
GR066	Hub Set, Port/STBD, CG-66-73	A							1	657
GR830	Production Engineering	A		160		97				
* GR067	LHA Shafting Rotatables									1328
	SUBTOTAL N85/N86			1519		2207				
	TOTAL			1519		2838		1496		2915

BUDGET PROCUREMENT HISTORY AND PLANNING
P-5A

A. DATE
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY BA 1:
SHIP SUPPORT EQUIPMENT

C. P-1 ITEM NOMENCLATURE
OTHER PROPS & SHAFTS 81GR/0540

COST ELEMENT/ FISCAL YEAR	LINE ITEM FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
GR022	INTERMEDIATE SHAFT CG-47 CL										
	FY 1997	UNKNOWN	RCP/FP	SPCC MECH	Jun-97	Dec-98	2	215,000	YES	NO	
GR044	BLADE SET PORT/ STBD DDG-51 CL										
	FY 1997	UNKNOWN	RCP/FP	SPCC MECH	Jul-97	Jan-99	2	539,000	YES	NO	
	FY 1998	UNKNOWN	RCP/FP/OPT	SPCC MECH	Dec-97	May-99	2	551,000	YES	NO	
GR045	HUB SET PORT/STBD DDG-51 CL										
	FY 1999	UNKNOWN	RCP/FP	SPCC MECH	May-99	Nov-00	1	707,000	YES	NO	
GR046	PROP SHAFT DDG-51 CL										
	FY 1998	UNKNOWN	RCP/FP	SPCC MECH	May-98	Nov-99	1	394,000	YES	NO	
GR055	SSN 688 IPMP SHAFT										
	FY 1997	UNKNOWN	RCP/FP	SPCC MECH	Feb-97	Feb-99	1	631,000	YES	NO	
GR056	PROPELLERS, AOE 6 CL										
	FY 1996	NSY PHILA	PX	NAVSEA	Jan-96	Jan-98	2	592,500	YES	NO	
GR060	OD BOXES PORT/ STBD CG-47 CL										
	FY 1997	UNKNOWN	RCP/FP	SPCC MECH	Jul-97	Jan-99	1	254,000	YES	NO	
GRO66	HUB SET, PORT/STBD, CG-66-73										
	FY 1999	UNKNOWN	RCP/FP	SPCC MECH	May-99	Nov-00	1	657,000	YES	NO	

D. REMARKS

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING
P-5A

A. DATE
FEBRUARY 1997

B. APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY BA 1:
SHIP SUPPORT EQUIPMENT

C. P-1 ITEM NOMENCLATURE
OTHER PROPS & SHAFTS 81GR/0540

COST ELEMENT/ FISCAL YEAR	LINE ITEM FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
GR061	INTERMEDIATE SHAFT PORT AOE-6 CL										
	1996	ERIE FORGE, PA	RCP/FP	SPCC MECH	Aug-96	Aug-98	1	174,000	YES	NO	
	1999	UNKNOWN	RCP/FP	SPCC MECH	May-99	May-01	1	223,000	YES	NO	
GR062	INTERMEDIATE SHAFT, STBD AOE-6 CL										
	1997	UNKNOWN	RCP/FP	SPCC MECH	Jan-97	Jan-99	2	174,000	YES	NO	
GR067	SHAFTING ROTATABLES										
	1999	UNKNOWN	RCP/FP	SPCC MECH	Mar-00	Sep-00		1,328,000			
GR830	PRODUCTION ENG										
	1996	SPCC MECH	WR	NAVSEA	Mar-96	Sep-96		20,000			
	1996	JJ MCMULLEN	LOE	NAVSEA	Mar-96	Mar-97		50,000			
	1996	SPCC MECH	WR	NAVSEA	Feb-97	Sep-97		90,000			
	1997	SPCC MECH	WR	NAVSEA	Dec-96	Sep-97		97,000			

D. REMARKS

CLASSIFICATION:			UNCLASSIFIED							
EXHIBIT P-40 BUDGET ITEM JUSTIFICATION									DATE	
									February 1997	
APPROPRIATION CODE/CC/BA/BSA/ITEM CONTROL NUMBER							P-1 ITEM NOMENCLATURE			
OPN/BA-1: SHIPS SUPPORT EQUIPMENT/067000							OTHER NAVIGATION EQUIPMENT/81GW			
PROGRAM ELEMENT FOR CODE B ITEMS							OTHER RELATED PROGRAM ELEMENTS			
RLGN: 060456N										
	PRIOR	ID CODE	1996	1997	1998	1999	2000	2001	2002	2003
PROC QTY										
GROSS COST										
LESS PY ADV PROC										
PLUS CY ADV PROC										
NET PROC (=P-1)										
INITIAL SPARES										
TOTAL PROC COST (In Millions)			$25.7	$26.5	$31.6	$46.0	$0.0	$0.0	$0.0	$0.0
FLYAWAY U/C										
WPN SYS PROC U/C										

Unit costs are various.

This is a continuing program composed of both maintenance equipment and newly developed improvements required for maintenance, shipalts, and training; including a cross section of navigati type equipment as follows:

GW006: FY 1996 and outyear maintenance component funds will satisfy depot and organizational maintenance requirements of existing AN/WSN-2 and AN/WSN-5 navigation systems during transition to AN/WSN-7 Ring Laser Gyro Navigator (replacement for AN/WSN-5). Specifically, these funds cover the procurement of major components such as Inertial Measuring Units (IMUs), gyroscopes, accelerometers, and depot test equipment. Procurement of major components is required to support the pipeline requirements of AN/WSN-2/5 navigation systems given the Fleet population and usage rates. The depot test equipment is required to support checkout and testing of these major components in a system configuration to verify performance prior to being dubbed "ready for issue." These components are essential to operation and performance of AN/WSN-2/5 navigation systems. Procurements associated with these components would aid to ensure the operational availability and performance of the navigation systems to support ship and combat system mission requirements.

GW013: FY 1996 and outyear funds for Navigation Field Change Kits will procure reliability and maintainability improvements and corrections for various equipment - Dead Reckoning Analyz Indicator (DRAI), plotters, gyro compasses, Electromagnetic Log (EM Log), Doppler Sonar Velocity Log (DSVL), Multi-Speed Repeaters (MSR), and Ship's Inertial Navigation System (SINS) MK 3 MOD 6. These changes are required to keep Fleet-installed equipment operating to a basic level.

GW014: FY 1996 and outyear funds are required for replacement of the AN/WSN-5 Input/Output Console currently installed in various surface combatants (OA-7984 and OL-267) with the OL-405/WSN-5. This replacement is required to improve the current operational availability and life cycle cost and ensure the navigation system is in a state of operational readiness. NAVSEA will procure 11 units for backfit on CG 49 Class ships, one unit per ship, at an estimated total cost (including installation) of $1.3M. Units willl be procured as follows: FY96 & prior = 7 units; FY97 = 2 units; FY98 = 2 units. NISE East (Norfolk) will be the installing agent beginning in FY95 with installation as reflected on the P-3A.

		P-1 SHOPPING LIST ITEM NO. 9				PAGE NO. 1 of 3			
								CLASSIFICATION:	
								UNCLASSIFIED	

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT P-40 BUDGET ITEM JUSTIFICATION		DATE
		February 1997
APPROPRIATION CODE/CC/BA/BSA/ITEM CONTROL NUMBER	P-1 ITEM NOMENCLATURE	
OPN/BA-1: SHIPS SUPPORT EQUIPMENT/067000	OTHER NAVIGATION EQUIPMENT/81GW	
PROGRAM ELEMENT FOR CODE B ITEMS	OTHER RELATED PROGRAM ELEMENTS	
RLGN: 060456N		

GW024: FY 1996 funds are required to procure the AN/KSQ-1 Amphibious Assault Direction System which integrates existing developments into a system that will support the command and control of surface amphibious assaults launched from extended Over-The-Horizon (OTH) off-shore ranges. The system adapts the USMC's Position Location Reporting System (PLRS) for Naval applications and integrates it with shipboard navigation and communications systems. The project is required to identify, track, communicate with, and control landing craft from launch through transit, offload and return. The AN/KSQ-1 program was zeroed in FY97 and out.

GW029: FY 1996 and outyear funds are required for AN/WSN-2, AN/WSN-5 and CVNS Engineering Change Proposals (ECPs)/Field Change (FC) Kits which will procure reliability and maintainability improvements, corrections and upgrades for various navigation systems. This includes AN/WSN-2/-5 product improvements, Global Positioning System (GPS), Aircraft Inertial Alignment System (AIAS), MK 70 Mod 6 Switchboard Ordalt and CA-64(XN-1)/U shipalt.

- AN/WSN-2 and Product Improvement (Field Change #1) will provide changes and additions to the basic system equipment which will improve retainability, maintainability and sustainability of the hardware.
- AN/WSN-2/2A Directional Gyro (Field Change #2) incorporates operational engineering changes to correct for deficiencies in the gyro mode of operation.
- Output Only (Field Change #2) converts input/output configured AN/WSN-5 systems into an output only configuration, to meet the requirements for navigation data placed on the AN/WSN-5 by individual platform combat weapon systems.
- Global Positioning System (GPS) (Field Change #4) provides a software and firmware change along with increased memory capability to the AN/WSN-5, which facilitates the direct interface of the AN/WRN-6 GPS User Equipment. GPS will provide extremely accurate position and altitude updates to the AN/WSN-5.
- Aircraft Inertial Alignment System (Field Change #6) provides changes and additions to the software, firmware, and hardware of the AN/WSN-5 which will allow it to transmit position and attitude information to the AV-8B and rotary wind aircraft attached to LHD/LHA class ships.
- Field Change #7 to the AN/WSN-5 incorporates engineering changes for product improvement and reliability enhancements. The primary change modifies the control monitor circuit card in order to avoid premature IMU failures and Inverter failures. In addition, modifications are made to the NTDS Type D High Level Serial sections to alleviate improper fault indications and maintain data integrity.
- AN/WSN-5 Field Change #8 provides changes and additions to the software and hardware of the AN/WSN-5, specifically, Low Level Serial firmware.
- The MK 70 Mod 6 Switchboard Ordalt allows constant monitoring of SINS synchro data transmission thereby increasing the integrity of and confidence in SINS attitude and velocity data.
- CA-64(XN-1)/U shipalt will replace the out of production OA-7984 thereby improving the current operational availability and life cycle cost and ensuring that the navigation system is in a state of operational readiness.
- TS-4491 shipalt will replace the Input/Output console on RLGN backfitted ships.

GW031: FY 1996 and outyear Dual Miniature Navigation System (DMINS) ECP/documentation funds are required to procure DMINS field changes, replacement of obsolete automated test equipment/computer at the DMINS Repair Depot, Inertial Measuring Unit (IMU) reliability improvements and update of technical documentation.

P-1 SHOPPING LIST ITEM NO. 9 **PAGE NO. 2 of 3**

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:			**UNCLASSIFIED**						
EXHIBIT P-40 BUDGET ITEM JUSTIFICATION									**DATE**
									February 1997
APPROPRIATION CODE/CC/BA/BSA/ITEM CONTROL NUMBER							**P-1 ITEM NOMENCLATURE**		
OPN/BA-1: SHIPS SUPPORT EQUIPMENT/067000							**OTHER NAVIGATION EQUIPMENT/81GW**		
PROGRAM ELEMENT FOR CODE B ITEMS							**OTHER RELATED PROGRAM ELEMENTS**		
RLGN: 060456N									

GW034: FY 1996 funds are required to procure the Position Location Reporting System (PLRS) which provides jam resistant network of UHF radio transceivers that automatically exchange pre-formatted data messages enabling the position of all units in the PLRS radio network to be rapidly determined.

GW035: FY 1996 and out year Ring Laser Gyro Navigator (RLGN) funds are required to support the acquisition and implementation of Ring Laser Gyro (RLG) technology for Fleet shipboard use. Congress has mandated that the Navy competitively procure a single RLGN system for both surface and submarine applications (backfit/forward fit). RLG technology is less expensive, more reliable and has lower cost of ownership. Advantages of the RLG are improved reliability, based on experience from military and commercial applications, longer life cycle support costs and extended endurance. Basic RDT&E efforts were funded FY94 under P.E. 0604562N, Project Number 00236. The current Development Test and Evaluation Schedule is as follows: DT-IIa=1/96; DT-IIb=4/96; DT-IIc=6/96; DT-IId=10/96. OT&E is scheduled for 11/96. Completion of Milestone III is anticipated for 6/97. NAVSEA will procure a total of 171 shipsets (2 systems per shipset) for backfit on submarines (AN/WSN-3), surface combatants (AN/WSN-5) and carriers (CVNS) at an estimated total cost (including installation) of $208.5M. RLG was approved for Low Rate Initial Production 12/94. Procurement began in FY95, using FY95 and prior AN/WSN-2/5 Field Change funds (GW029). Procurement is as follows: FY96 and prior=14 shipsets; FY97=8 shipsets; FY98=16 shipsets; FY99=32 shipsets; FY00=29 shipsets; FY01=26 shipsets; FY02=21 shipsets. NISE East, Norfolk will be the installing agent beginning in FY97 with installation aboard 4 CG 47 Class combatants. The remaining shipsets will be installed as shown on the P-3A.

GW830: FY 1996 and outyear funds are required for AN/WSN-2/5 and Aircraft Carrier Navigation System (CVNS) production engineering to provide the necessary management/technical support for hardware procurements and system integration. Funds cover value engineering; review and evaluation of production design data and documentation; production configuration control; maintenance engineering and logistic supportability efforts designed and incorporated into the production manufacturing process.

GW5IN: FY 1996 and outyear Installation funding identified supports installation of OL-405 I/O Consoles (Shipalt 370) aboard CG 47 Class ships, installation of RLGN aboard surface combatants (CG47 and DDG 51 Classes), and installation of PLRS and AN/KSQ-1 systems aboard various LHA, LCAC and LPD ship classes.

THE BUDGET REFLECTS THE TRANSFER OF DESIGN SERVICES INTO THE APROPRIATE EQUIPMENT P-1 LINE ITEM BEGINNING IN FY98.

		P-1 SHOPPING LIST ITEM NO. 9				**PAGE NO. 3 of 3**			
								CLASSIFICATION:	
								UNCLASSIFIED	

CLASSIFICATION: **UNCLASSIFIED**

WEAPON SYSTEM COST ANALYSIS
EXHIBIT (P-5)

DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY: OPN BA-1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD: OTHER NAVIGATION EQUIPMENT/81GW

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	SUBMARINES - N87									
GW006	AN/WSN-2 MAINTENANCE COMPONENTS			369		150		228		166
GW013	NORFOLK NAVIGATION FC KITS			700		0		515		27
GW029	AN/WSN-2/7 ECP/FC KITS			821		315		661		577
GW031	DMINS			57		62		67		0
GW035	RING LASER GYRO NAVIGATOR (AN/WSN	B	7	9,141		0		0	4	3,497
GW830	PROD ENGINEERING FOR AN/WSN-2/7			402		64		318		366
	SUB-TOTAL			11,490		591		1,789		4,633
	SURFACE SHIPS - N86									
GW006	AN/WSN-2/5 MAINTENANCE COMPONENTS			2,970		2,131		6,252		5,637
GW013	NORFOLK NAVIGATION FC KITS			150		250		258		266
GW014	AN/WSN-5 I/O CONSOLE	A	5	345	2	142	2	146		0
GW029	AN/WSN-2/5/7 ECP/FC KITS			1,037		8,603		3,616		6,359
GW035	RING LASER GYRO NAVIGATOR (AN/WSN	B	2	2,881	12	10,156	12	8,944	25	19,238
GW830	PROD ENGINEERING FOR AN/WSN-2/5/7			612		846		840		978
	SUB-TOTAL			7,995		22,128		20,056		32,478
	AMPHIBIOUS SHIPS - N85									
GW024	AN/KSQ-1 AMPHIB ASSAULT SYSTEM	A	Var	2,398		0		0		0
GW034	PLRS	A	Var	821		0		0		0
	SUB-TOTAL			3,219		0		0		0
	AIRCRAFT CARRIERS - N88									
GW029	CVNS/WSN-7 ECP/FC KITS			397		1,237		2,637		2,698
GW031	DMINS ECP/DOCUMENTATION			84		124		124		124
GW035	RING LASER GYRO NAVIGATOR (AN/WSN	B		0	1	824	4	3,395	3	2,639
GW830	PROD ENGINEERING FOR CVNS/AN/WSN-7			100		341		430		416
	SUB-TOTAL			581		2,526		6,586		5,877
	TOTAL - PROCUREMENT			23,285		25,245		28,431		42,988

CLASSIFICATION:	UNCLASSIFIED								
								DATE:	
	WEAPON SYSTEM COST ANALYSIS								
	EXHIBIT (P-5)							February 1997	
APPROPRIATION/I		P-1 ITEM NOMENCLATURE/SUBHEAD							
OPN BA-1: SHIPS SUPPORT EQUIPMENT		OTHER NAVIGATION EQUIPMENT/81GW							
		TOTAL COST IN THOUSANDS OF DOLLARS							
COST CODE	ELEMENT IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
	QTY	OTAL COS	QTY	OTAL COS	QTY	OTAL COS	QTY	OTAL COST	
	SUBMARINES - N87								
GW5IN	INSTALLATION OF EQUIPMENT (FMP)	1,100		0		1,854		0	
GW5IN	FMP DESIGN SERVICES ALLOCATION	0		0		425		0	
SUB-TOTAL		1,100		0		2,279		0	
	SURFACE SHIPS - N86								
GW5IN	INSTALLATION OF EQUIPMENT (FMP)	8		1,289		684		2,241	
GW5IN	FMP DESIGN SERVICES ALLOCATION	0		0		158		349	
SUB-TOTAL		8		1,289		842		2,590	
	AMPHIBIOUS SHIPS - N85								
GW5IN	INSTALLATION OF EQUIPMENT (FMP)	1,334		0		0		0	
SUB-TOTAL		1,334		0		0		0	
	AIRCRAFT CARRIERS - N88								
GW5IN	INSTALLATION OF EQUIPMENT (FMP)	0		0		0		318	
GW5IN	FMP DESIGN SERVICES ALLOCATION	0		0		0		74	
SUB-TOTAL		0		0		0		392	
L - INSTALLATION		2,442		1,289		3,121		2,982	
GRAND TOTAL		25,727		26,534		31,552		45,970	
DD FORM 2446, JUN	P-1 SHOPPING LIST					CLASSIFICATION:			
	ITEM NO. 9	PAGE NO. 5				UNCLASSIFIED			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OPN BA-1: SHIPS SUPPORT EQUIPMENT	OTHER NAVIGATION EQUIPMENT	81GW

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
GW014	OL-405 I/O CONSOLE										
	FY 1996	TBD	C/FP	TBD	04/96	01/97	5	69.0	YES	NO	
	FY 1997	TBD	C/FP	TBD	04/97	01/98	2	71.0	YES	NO	
	FY 1998	TBD	C/FP	TBD	04/98	01/99	2	73.0	YES	NO	
GW024	AN/KSQ-1* (GPSUI)										
	FY 1996 (Option 1)	SECHAN ELEC	COMP	CSS	05/96	11/96	62	4.5	YES	NO	
	FY 1996 (Option 2)	LITITZ, PA			09/96	03/97	77	4.5			
GW034	PLRS*										
	FY 1996 (Various)	CSS	WX	NAVSEA	02/96	02/96	VAR	N/A	NO	NO	
GW035	RING LASER GYRO **										
	FY 1996 (Submarin	SPERRY MARINE	FPI	NAVSEA	07/96	01/98	7	1,305.9	NO	NO	
	(Surface	HARLOTTESVILLE, VA					2	1,440.5			
	FY 1997 (Surface)	SPERRY MARINE	FFP	NAVSEA	04/97	10/98	12	846.3	NO	NO	
	(Carrier)	HARLOTTESVILLE, VA					1	824.0			
	FY 1998 (Surface)	SPERRY MARINE	FFP	NAVSEA	04/98	10/99	12	745.3	NO	NO	
	(Carrier)	HARLOTTESVILLE, VA					4	848.8			
	FY 1999 (Submarin	SPERRY MARINE	FFP	NAVSEA	04/99	10/00	4	874.3	NO	NO	
	(Surface	HARLOTTESVILLE, VA					25	769.5			
	(Carrier)						3	879.7			

REMARKS

* The AN/KSQ-1 is made up of 3 configurations, 1 for the Amphibious Command Group (ACG), 1 for the Secondary/Primary Control Group (PCG) and 1 for the User Terminal Group (UTG). The AN/KSQ-1 system includes the following equipments: GPSIU, TAC-N Computer, RG Enclosure, Printer, Cable Assemblies, Mute Interface Box and various connectors. The PLRS system includes the following equipments: Receiver-Transmiter, Control Readout Unit, Pilot Control Display Panel, Power Adapter, Remote Annuniciator, CRU and Downsized Master Station. FY96 procurement consists of various installation materials, production supt and ECP changes.

** Note: Cost variances between Surface, Submarine and Carrier configurations due to additional circuit cards required for aircraft alignment (Carrier) and for extra cabinetry for the submarine configuration. FY96 includes non-recurring.

P3A INDIVIDUAL MODIFICATION DATE: February 1997

MODIFICATION TITLE: OTHER NAV/OL-405 Input/Output Console (ALT 00370) GW014

MODELS OF SYSTEM AFFECTE AN/WSN-5

DESCRIPTION/JUSTIFICATION: The AN/WSN-5 Input/Output Console upgrade program is aimed at replacing the existing consoles (OA-7984 and OL-267) currently installed in various surface combatants with the OL-405. This Shipalt must be installed prior to or concurrently with Shipalt 0177 CDS console upgrade. Assets being removed with the installation of OL-405 are required to satisfy hardware requirements of Shipalt 0177.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			11	0.8
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT	7	0.480	2	0.142	2	0.146													11	0.8
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	2	0.078	5	0.116															7	0.19
FY97 EQUIPMENT					2	0.070													2	0.07
FY98 EQUIPMENT							1	0.023	1	0.023									2	0.05
FY99 EQUIPMENT																			0	0.00
FY00 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
FY02 EQUIPMENT																				
FY03 EQUIPMENT																				
TO COMPLETE																			0	0.00
TOTAL INSTALLATION COST		0.078		0.116		0.070		0.023		0.023		0.000		0.000		0.000	0.000		11	0.3
TOTAL PROCUREMENT COST		0.480		0.142		0.146		0.000		0.000		0.000		0.000		0.000	0.000			0.8
TOTAL COST		0.558		0.258		0.216		0.023		0.023		0.000		0.000		0.000	0.000			1.1

METHOD OF IMPLEMENTATION: INDUSTRIAL FACILITY ADMINISTRATIVE LEADTIME: 2 mos PRODUCTION LEADTIME: 9 mos

CONTRACT DATE: PRIOR YEAR: Apr-96 CURRENT YEAR: Apr-97 BUDGET YEAR: Apr-98 BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Jan-97 CURRENT YEAR: Jan-98 BUDGET YEAR: Jan-99 BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL	
										11	TOTAL
FY 96 & Prior	00,01,01,00	01,01,02,01								7	
FY 97			00,02,00,00							2	
FY 98				00,01,00,00	01,00,00,00					2	
FY 99 & Out										0	

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL	
										11	TOTAL
FY 96 & Prior	00,00,01,00	01,00,00,01	00,00,02,00	00,02,00,00						7	
FY 97			00,00,00,02							2	
FY 98				00,01,00,00	00,00,01,00					2	
FY 99 & Out										0	

P3A INDIVIDUAL MODIFICATION DATE: February 1997

MODIFICATION TITLE: OTHER NAV/AN/KSQ-1 Amphibious Assault Direction System GW024

MODELS OF SYSTEM AFFECTED: AN/KSQ-1

DESCRIPTION/JUSTIFICATION: The AN/KSQ-1 integrates existing development into a system which will support the command and control of surface amphibious assaults launched from extended Over-The-Horizon (OTH) off-shore ranges. The system adapts the USMC's Position Location Reporting System (PLRS) for Naval applications and integrates it with shipboard navigation and communications systems. The project is required to identify, track, communicate with, and control landing craft from launch through transit, offload and return.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT																			VAR	2.9
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT	62*	2.892																	VAR	2.9
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	62*	0.812																	VAR	0.81
FY97 EQUIPMENT																			0	0.00
FY98 EQUIPMENT																			0	0.00
FY99 EQUIPMENT																			0	0.00
FY00 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
FY02 EQUIPMENT																			0	0.00
FY03 EQUIPMENT																			0	0.00
TO COMPLETE																				
TOTAL INSTALLATION COST		0.812		0.000		0.000		0.000		0.000		0.000		0.000		0.000				0.8
TOTAL PROCUREMENT COST		2.892		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		2.9
TOTAL COST		3.704		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		3.7

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 4 mos PRODUCTION LEADTIME: 8 mos

CONTRACT DATE: PRIOR YEAR: May-96 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Nov-96 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & Prior										
FY 97										
FY 98										
FY 99										
FY 00										
FY 01										
FY 02 & Out										

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & Prior										
FY 97										
FY 98										
FY 99										
FY 00										
FY 01										
FY 02 & Out										

***NOTE: ITEMS PROCURED: GPSIU (QTY 62), TAC-N COMPUTERS (QTY 4), PRINTERS (QTY 4), AND MISC INSTALLATION MATERIAL I.E. CABLES AND CONNECTORS (QTY VARIOUS)**
CONTRACT AND DELIVERY DATA ADDRESS ONLY GPSUI.

P3A INDIVIDUAL MODIFICATION DATE: February 1997

MODIFICATION TITLE: OTHER NAV/Position Location Reporting System (PLRS) GW034

MODELS OF SYSTEM AFFECTED: PLRS

DESCRIPTION/JUSTIFICATION: The PLRS provides jam resistant network of UHF radio transceivers that automatically exchange pre-formatted data messages enabling the position of all units in the PLRS radio network to be rapidly determined.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			VAR	3.4
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT	100*	3.447																	VAR	3.4
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	100*	4.082																	VAR	4.08
FY97 EQUIPMENT																			0	0.00
FY98 EQUIPMENT																			0	0.00
FY99 EQUIPMENT																			0	0.00
FY00 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
FY02 EQUIPMENT																			0	0.00
FY03 EQUIPMENT																			0	0.00
TO COMPLETE																				
TOTAL INSTALLATION COST		4.082		0.000		0.000		0.000		0.000		0.000		0.000		0.000				4.1
TOTAL PROCUREMENT COST		3.447		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		3.4
TOTAL COST		7.529		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		7.5

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 6 mos PRODUCTION LEADTIME: VAR

CONTRACT DATE: PRIOR YEAR: May-96 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Sep-96 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & Prior										
FY 97										
FY 98										
FY 99										
FY 00										
FY 01 and Out										

OUTPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & Prior										
FY 97										
FY 98										
FY 99										
FY 00										
FY 01 and Out										

***NOTE: ITEMS PROCURED: PLRS ANTENNA (QTY 100) AND INSTALLATION MATERIAL I.E. CABLES AND CONNECTORS (QTY VARIOUS)**
PRIOR YEAR CONTRACT AND DELIVERY DATA REFER TO UROs ONLY. CURRENT YEAR REFERS TO MISCELLANEOUS ITEMS.

P3A INDIVIDUAL MODIFICATION DATE: February 1997

MODIFICATION TITLE: OTHER NAV/Ring Laser Gyro GW035

MODELS OF SYSTEM AFFECTED: AN/WSN-3, AN/WSN-5 and CVNS

DESCRIPTION/JUSTIFICATION: The Ring Laser Gyro program is aimed at replacing existing inertial navigation systems currently installed in various surface and sub-surface combatants.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			169	159.5
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT	14*	16.068	13	10.980	9	12.339	32	25.374	29	25.443	25	22.068	19	16.722	0	0.000	28	30.502	169	159.5
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR			4	1.173	8	3.051													12	4.22
FY97 EQUIPMENT							7	2.959	6	2.752									13	5.71
FY98 EQUIPMENT									9	4.370									9	4.37
FY99 EQUIPMENT											32	12.590							32	12.59
FY00 EQUIPMENT													29	11.581					29	11.58
FY01 EQUIPMENT															25	11.103			25	11.10
FY02 EQUIPMENT																	19	7.006	19	7.01
FY03 EQUIPMENT																			0	0.00
TO COMPLETE																	28	10.926	28	10.93
TOTAL INSTALLATION COST		0.000		1.173		3.051		2.959		7.122		12.590		11.581		11.103		7.006	167	67.5
TOTAL PROCUREMENT COST		16.068		10.980		12.339		25.374		25.443		22.068		16.722		0.000		30.502		159.5
TOTAL COST		16.068		12.153		15.390		28.333		32.565		34.658		28.303		11.103		37.508		227.0

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 6 mos PRODUCTION LEADTIME: 18 mos

CONTRACT DATE: PRIOR YEAR: Jul-96 CURRENT YEAR: Mar-97 BUDGET YEAR: Mar-98 BUDGET YEAR 2: Mar-99

PRODUCTION DELIVER DATE: PRIOR YEAR: Jan-98 CURRENT YEAR: Sep-99 BUDGET YEAR: Sep-00 BUDGET YEAR 2: Sep-01

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC		
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL	
										167	TOTAL
FY 96 & Prior		00,04,00,00	08,00,00,00							12	
FY 97				07,00,00,00	06,00,00,00					13	
FY 98					09,00,00,00					9	
FY 99						32.00.00.00				32	
FY 00							29.00.00.00			29	
FY 01								25,00,00,00		25	
FY 02 & Out									19,00,00,28	47	

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC		
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL	
										167	TOTAL
FY 96 & Prior			00,00,00,04	00,00,00,08						12	
FY 97					0,00,00,07	00,00,00,06				13	
FY 98						00,00,00,09				9	
FY 99							00,00,00,32			32	
FY 00								00,00,00,29		29	
FY 01									00,00,00,25	25	
FY 02 & Out									00,00,00,47	47	

*** FY96 & PRIOR: 2 SHIPSETS WILL BE USED AT THE LBTF AND DO NOT REQUIRE INSTALL DOLLARS. FIVE SHIPSETS WERE PROCURED WITH FY94/95 AN/WSN-2/5 FIELD CHANGE DOLLARS (GW029)**

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE UNDERWAY REPLENISHMENT EQUIPMENT (81GO)

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	$11.7	$11.6	$8.2	$8.7	$10.2	$8.3	$3.4	$3.9

This line item encompasses equipment required to provide the Fleet with a reliable Stream Underway Replenishment capability. The equipment is used to transfer ammunition, missiles, fuel and cargo by alongside replenishment techniques, cranes and elevators. This new equipment is essential to the Fleet to: (a) enhance personnel equipment safety; (b) reduce maintenance costs; (c) lengthen intervals between equipment failures; (d) allow heavylift transfer (i.e., aircraft engines) and (e) shorten along-side time and, thereby reducing ship vulnerability to enemy action. Installation costs are included. Some of the significant items included are as follows:

STREAM EQUIPMENT MODS - (G0011) - This item will support the replacement of Stream Equipment components by mods kits to correct deficiencies. This work will be performed by AIT teams or SHIPALTS. Mods include Sliding Block Ship Clutches, Limit Switches, NATO kits, and One Man Control Station.

AOE STREAM MODERNIZATION (G0043) - This item replaces 25 year old, unreliable STREAM systems with modern, reliable Navy Standard STREAM Systems on AOE 1 Class. SHIPALTS AOE-761K, 762K and 764K apply.

PRODUCTION ENGINEERING - (G0830) - The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical Manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD) Program Support Data (PSD) and Allowance Parts List (APL's); Engineering in support of final design reviews. This work can be accomplished by NAVSSES as the In Service Engineering Agent, other Naval activities or contractors as appropriate.

EQUIPMENT INSTALLATION - (G05IN) - Funding is for the installation of equipment including Fleet Modernization Program installation of training equipment and installation of equipment in other shore facilities.

G0DSA - DESIGN SERVICES ALLOCATION - The Budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY THER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	**P-1 ITEM NOMENCLATURE** UNDERWAY REPLENISHMENT EQUIPMENT

PRODUCTION ENGINEERING - (G0830) - The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical Manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD) Program Support Data (PSD) and Allowance Parts Lists (APL's); Engineering in support of final design reviews. This work can be accomplished by NAVSSES as the In Service Engineering Agent, other Naval activities or contractors as appropriate.

CLASSIFICATION: **UNCLASSIFIED**

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	PROGRAM COST BREAKDOWN								DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE/SUBHEAD								
ER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT		UNDERWAY REPLENISHMENT EQUIPMENT 81GO/0740								
			TOTAL COST IN THOUSANDS OF DOLLARS							
COST CODE	ELEMENT OF COST	IDENT CODE		FY 1996		FY 1997		FY 1998		FY 1999
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	N85									
G0011	STREAM EQUIPMENT MODS						2	360		
G0830	PRODUCTION ENGINEERING							60		
	SUBTOTAL N85							420		
	N86									
G0011	STREAM EQUIPMENT MODS		11	1,887			10	999	23	1,100
G0043	AOE STREAM MODERNIZATION	A					2	3,600		
G0830	PRODUCTION ENGINEERING	A		280				690		135
	SUBTOTAL N86			2,167				5,289		1,235
	N88									
G0011	STREAM EQUIPMENT MODS				9	281			12	142
	SUBTOTAL N88					281				142
	TOTAL EQUIPMENT			2,167		281		5,709		1377
G05IN	INSTALLATION *			* 9,569		11,331		1,950		6,389
G0DSA	DESIGN SERVICES ALLOCATION							530		936
	TOTAL INSTALLATION			* 9,569		11,331		2,480		7,325
	GRAND TOTAL			11,736		11,612		8,189		8,702

* 1.9 million reprogrammed to AN/SPS-48 Radar Install on CVN 73 in FY 96. Mine Warfare addition in FY 99.

P-1 SHOPPING LIST ITEM NO. PAGE NO.

Exhibit P-5 Weapon System Cost Analysis CLASSIFICATION:

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING
P-5A

A. DATE
FEBRUARY 1997

B. APPROPRIATION/BUDGET ACTIVITY

OTHER PROCURMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

C. P-1 ITEM NOMENCLATURE

UNDERWAY REPLENISHMENT EQUIPMENT 81GO/0740

COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
STREAM EQUIPMENT MODS G0011										
FY 1996	NSWC PHILA, PA	PO	NAVSEA	Feb-96	Sep-96	3	61,666	YES	NO	
FY 1996	NSWC PORT HUENEME, CA	PO	NAVSEA	Feb-96	Sep-96	1	450,000	YES	NO	
FY 1996	NSWC PHILA, PA	PO	NAVSEA	Apr-96	Sep-96	1	48,000	YES	NO	
FY 1996	NSWC CRANE, IN	WR	NAVSEA	Mar-96	Sep-96	3	286,000	YES	NO	
FY 1996	NSWC PHILA, PA	WR	NAVSEA	Mar-96	Sep-96	3	115,333	YES	NO	
FY 1997	NSWC PHILA, PA	WR	NAVSEA	Dec-96	Sep-97	9	31,222	YES	NO	
FY 1998	UNKNOWN	RCP	NSWC, PHD	Apr-98	Dec-99	2	180,000	YES	NO	
FY 1998	NSWC PHILA, PA	WR	NAVSEA	Dec-97	Sep-98	5	99,900	YES	NO	
FY 1998	NSWC PORT HUENEME, CA	WR	NAVSEA	Dec-97	Sep-98	5	99,900	YES	NO	
FY 1999	NSWC, PHILADELPHIA, PA	WR	NAVSEA	Dec-98	Sep-99	35	35,485	YES	NO	
AOE STREAM MODERNIZATION G0043										
FY 1998	NSWC PORT HUENEME, CA	RCP	NAVSEA	Jan-98	Feb-99	2	1,800,000	YES	NO	

D. REMARKS

CLASSIFICATION: UNCLASSIFIED

P3A FEBRUARY 1997

MODIFICATION TITLE: GANTRY CRANES

MODELS OF SYSTEM AFFECTED: UNDERWAY REPLENISHMENT SYSTEM

DESCRIPTION/JUSTIFICATION: Crane Improvement - (G0030) - These cranes are for installation on destroyer tenders and floating drydocks.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY96															TO COMP	TO COMP	TOTAL	TOTAL
	QTY	PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	COST	QTY	COST
FINANCIAL PLAN (IN MILLIONS) P-5																				
RDT&E																				
PROCUREMENT	2																		2	0.0
QUANTITY																				
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT		1.5																	0	1.5
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 & PRIOR EQUIPMENT	2	0.4																	2	0.4
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY 03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST	2	0.4				0		0		0				0		0			0	0.4
TOTAL PROCUREMENT COST	0.0	1.5		0.0		0.0		0.0		0.0				0.0		0.0			0	1.5
TOTAL COST	0.0	1.9		0.0		0.0		0.0		0.0				0.0		0.0			0	1.9

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 6 PRODUCTION LEADTIME: 24

CONTRACT DATE: PRIOR YEAR: Jun-92 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Mar-94 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 & PRIOR	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY96 & PRIOR	2									2

OUTPUT =====>	FY96 & PRIOR	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY96 & PRIOR	2									2

P-3A

ITEM 10 PAGE 5 CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: STREAM UNREP MODS EQUIPMENT G0011

MODELS OF SYSTEM AFFECTED: UNDERWAY REPLENISHMENT SYSTEM (AIT)

DESCRIPTION/JUSTIFICATION: Various equipment such as Stream Equip Mod, and Sliding Block Mods (AIT)

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS) P-5	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																				
PROCUREMENT			*																0	0.0
QUANTITY	42		9		12		35				6		1		1				106	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.9		0.3		1.4		1.2		0		0.6		0.1		0.1			0	5.6
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	2	1.6	28	2.7	12	2.0													42	6.3
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT							12	1.9											12	1.9
FY99 EQUIPMENT									30	3.1	5	2.5							35	5.6
FY00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT													6	0.7					6	0.7
FY02 EQUIPMENT															1	1.8			1	1.8
FY03 EQUIPMENT																	1	1.8	1	1.8
TO COMPLETE																				
TOTAL INSTALLATION COST	2	1.6	28	2.7	12	2.0	12	1.9	30	3.1	5	2.5	6	0.7	1	1.8		1.8	97.0	18.1
TOTAL PROCUREMENT COST		1.9		0.3		1.4		1.2		0.0		0.6		0.1		0.1		0.0		5.6
TOTAL COST		3.5		3.0		3.4		3.1		3.1		3.1		0.8		1.9		1.8		23.7

METHOD OF IMPLEMENTATION: VAR — ADMINISTRATIVE LEADTIME: VAR — PRODUCTION LEADTIME: VAR

CONTRACT DATE: — PRIOR YEAR: — CURRENT YEAR: — VAR — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: — PRIOR YEAR: — CURRENT YEAR: — VAR — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96	2	28	12							42
FY 97										0
FY 98				12						12
FY 99					30	5				35
FY 00										0
FY 01							6			6
FY 02								1		1
FY 03									1	1
TC										0

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96	2	28	12							42
FY 97										0
FY 98				12						12
FY 99					30	5				35
FY 00										0
FY 01							6			6
FY 02								1		1
FY 03									1	1
TC										0

97

* FY 97 (9) Kits required no install funds.

ITEM 10 — PAGE 6 — CLASSIFICATION: UNCLASSIFIED — P-3A

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: UNDERWAY REPLENISHMENT AIT

MODELS OF SYSTEM AFFECTED: FORK TRUCK GUARD/CARGO WPNS ELEV (G0027)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

		FY 96 &														TO COMP	TO COMP	TOTAL	TOTAL
	QTY	PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	COST	QTY	COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																			0.0	0.0
QUANTITY	14																		14	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		2.0																	0	2.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	2	0.5	12	3.6															14	4.1
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST	2	0.5	12	3.6		0		0		0		0		0				0	14	4.1
TOTAL PROCUREMENT COST		2.0		0.0		0.0		0.0		0.0		0.0		0.0				0.0		2.0
TOTAL COST		2.5		3.6		0.0		0.0		0.0		0.0		0.0				0.0		6.1

METHOD OF IMPLEMENTATION: C | ADMINISTRATIVE LEADTIME: 9 | PRODUCTION LEADTIME: 15

CONTRACT DATE: | PRIOR YEAR: | VAR | CURRENT YEAR: | BUDGET YEAR: 1 | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: | VAR | CURRENT YEAR: | BUDGET YEAR: 1 | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY96 & PRIOR	2	12								14

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY96 & PRIOR	2		12							14

* PRIOR YEAR COLUMN INDICATES EQUIPMENT PRIOR TO FISCAL YEAR 93

CLASSIFICATION: UNCLASSIFIED

P3A — FEBRUARY 1997

MODIFICATION TITLE: REPL SPANWIRE WN WITH NAVY STD

MODELS OF SYSTEM AFFECTED: UNDERWAY REPLENISHMENT SYSTEM

DESCRIPTION/JUSTIFICATION: SPANWIRE WINCH (G0010) - This item replaces non-standard winch beds with a standard Navy owned design at 5 fueling at sanitary block sea sending station in the 5 AO 177 Class ships.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT	5																		5	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.5																	0	0.5
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	5	0.8																	5	0.8
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST	5	0.8		0.0		0		0		0		0		0		0		0	5	0.8
TOTAL PROCUREMENT COST		0.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.5
TOTAL COST		1.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.3

METHOD OF IMPLEMENTATION: — ADMINISTRATIVE LEADTIME: 9 — PRODUCTION LEADTIME: 20 MONTHS

CONTRACT DATE: — PRIOR YEAR: Jan-93 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: — PRIOR YEAR: Apr-94 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	5									5

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	5									5

P-3A

ITEM 10 — PAGE 8 — CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION:		UNCLASSIFIED																									
P3A						INDIVIDUAL MODIFICATION																			FEBRUARY 1997		
MODIFICATION TITLE: STREAM SLIDING BLOCK DRIVES & CLUTCHES																											
MODELS OF SYSTEM AFFECTED: UNDERWAY REPLENISHMENT SYSTEM (G0042)																											
DESCRIPTION/JUSTIFICATION: These mods replace obsolete drives and transfer heads to improve oprational safety and performance.																											
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																							TO	TO			
						FY96 &																	COMP	COMP	TOTAL	TOTAL	
					QTY	PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY02	QTY	FY03	COST	QTY	COST	QTY	COST	
FINANCIAL PLAN (IN MILLIONS)																											
RDT&E																											
PROCUREMENT																									0	0.0	
QUANTITY					15																				15	0.0	
INSTALLATION KITS																									0	0.0	
INSTALLATION KITS NONRECURRING																									0	0.0	
EQUIPMENT						2.9																			0	2.9	
EQUIPMENT NONRECURRING																									0	0.0	
ENGINEERING CHANGE ORDERS																									0	0.0	
DATA																									0	0.0	
TRAINING EQUIPMENT																									0	0.0	
SUPPORT EQUIPMENT																									0	0.0	
OTHER																									0	0.0	
INTERIM CONTRACTOR SUPPORT																									0	0.0	
INSTALLATION OF HARDWARE																											
FY96 EQUIPMENT & PRIOR					9	2.8	6	0.4																	15	3.2	
FY97 EQUIPMENT																									0	0.0	
FY98 EQUIPMENT																									0	0.0	
FY99 EQUIPMENT																									0	0.0	
FY00 EQUIPMENT																									0	0.0	
FY 01 EQUIPMENT																									0	0.0	
TO COMPLETE																									0	0.0	
																									0	0.0	
TOTAL INSTALLATION COST					9	2.8	6	0.4		0.0		0.0		0.0		0.0		0.0							15	3.2	
TOTAL PROCUREMENT COST						2.9		0.0		0.0		0.0		0.0		0.0		0.0								2.9	
TOTAL COST						5.7		0.4		0.0		0.0		0.0		0.0		0.0								6.1	
METHOD OF IMPLEMENTATION: C									ADMINISTRATIVE LEADTIME: 4						PRODUCTION LEADTIME: 12 MONTHS												
CONTRACT DATE:			PRIOR YEAR:			Mar-95			CURRENT YEAR:				BUDGET YEAR:				BUDGET YEAR 2:										
PRODUCTION DELIVER DATE:			PRIOR YEAR:			Mar-97			CURRENT YEAR:				BUDGET YEAR:				BUDGET YEAR 2:										
INSTALLATION SCHEDULE:																											
INPUT =======>		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03	TC										
		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4	1, 2, 3, 4		TOTAL								
FY 96 & PRIOR		7	2	6															15								
OUTPUT =====>		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03	TC										
		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4	1, 2, 3, 4		TOTAL								
FY 96 & PRIOR		7		2		6													15								
																											P-3A
									ITEM	10	PAGE	9								CLASSIFICATION: UNCLASSIFIED							

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: UNDERWAY REPLENISHMENT

MODELS OF SYSTEM AFFECTED: INSTALL RAS STATION - (G0032)

DESCRIPTION/JUSTIFICATION: Cargo/Weapon transfer capability to CV/CVN class ships

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY02	QTY	FY03	QTY	COST	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																						
PROCUREMENT	1																				1	0.0
QUANTITY																					0	0.0
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT		1.1																			0	1.1
EQUIPMENT NONRECURRING																					0	0.0
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																					0	0.0
OTHER																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
INSTALLATION OF HARDWARE																						
FY96 EQUIPMENT & PRIOR			1	2.8																	1	2.8
FY97 EQUIPMENT																					0	0.0
FY98 EQUIPMENT																					0	0.0
FY99 EQUIPMENT																					0	0.0
FY00 EQUIPMENT																					0	0.0
FY 01 EQUIPMENT																					0	0.0
FY 02 EQUIPMENT																						
FY 03 EQUIPMENT																						
TO COMPLETE																					0	0.0
																					0	0.0
TOTAL INSTALLATION COST		0.0		2.8		0.0		0.0		0.0		0.0		0.0							1	2.8
TOTAL PROCUREMENT COST		1.1		0.0		0.0		0.0		0.0		0.0		0.0								1.1
TOTAL COST		1.1		2.8		0.0		0.0		0.0		0.0		0.0								3.9

METHOD OF IMPLEMENTATION: C — ADMINISTRATIVE LEADTIME: 4 — PRODUCTION LEADTIME: 24 MONTHS

CONTRACT DATE: — PRIOR YEAR: — May-96 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: — PRIOR YEAR: — May-98 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR		1								1
FY 97										
FY 98										
FY 99										
FY 00										
FY 01										
FY 02										1
FY 03										
TC										

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR			1							1
FY 96										
FY 97										
FY 98										
FY 99										
FY 00										1
FY 01										
FY 02										
FY 03										
TC										

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: UNDERWAY REPLENISHMENT

MODELS OF SYSTEM AFFECTED: SADDLE WINCH - (G0003)

DESCRIPTION/JUSTIFICATION: Used to transfer fuel from one ship to another

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	COMP QTY	COMP COST	TO TOTAL QTY	TO TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	23																		23	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.2																	0	1.2
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	1.2
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	12	1.4	11	1.3															23	2.7
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST		1.4		1.3		0.0		0.0		0				0				0	23	2.7
TOTAL PROCUREMENT COST		1.2		0.0		0.0		0.0		0.0				0.0				0.0		1.2
TOTAL COST		2.6		1.3		0.0		0.0		0.0				0.0				0.0		3.9

METHOD OF IMPLEMENTATION: AIT | ADMINISTRATIVE LEADTIME: 6 | PRODUCTION LEADTIME: 12

CONTRACT DATE: | PRIOR YEAR: 02/93 | Feb-93 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: 03/94 | Feb-94 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
INPUT =======>	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	6 6	6 5								23
OUTPUT ======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	6 6	6 5								23

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ITEM 10 PAGE 11 | CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: UNDERWAY REPLENISHMENT

MODELS OF SYSTEM AFFECTED: SLIDING PADEYES (G0012)

DESCRIPTION/JUSTIFICATION: Allows safe receipt of heavy cargo load

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT	5										1		2		2				10	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.4										0.1		0.2		0.2			0	0.9
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	2	0.9	2	0.4									1	1.0					5	2.3
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT									AP	0.2			1	1.0					1	1.2
FY02 EQUIPMENT															2	1.7			2	1.7
FY 03 EQUIPMENT																	2	1.7	2	1.7
TO COMPLETE																				
TOTAL INSTALLATION COST	3	0.9	2	0.4		0.0		0.0		0.2		0.0	1	2.0	2	1.7	2	1.7	10	6.9
TOTAL PROCUREMENT COST		0.4		0.0		0.0		0.0		0.0		0.1		0.2		0.2		0.0		0.9
TOTAL COST		1.3		0.4		0.0		0.0		0.2		0.1		1.8		1.9		1.7		7.8

METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 4
PRODUCTION LEADTIME: 12

CONTRACT DATE: PRIOR YEAR: Dec-89 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Dec-90 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

INSTALLATION SCHEDULE

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	2	0020					0100			5
FY 97										0
FY 98										0
FY 99										0
FY 00										
FY 01							1			1
FY 02								2		2
FY 03									2	2
TC										
										10

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR		2000	2000				0001			5
FY 97										0
FY 98										0
FY 99										0
FY 00										
FY 01							1			1
FY 02								2		2
FY 03									2	2
TC										
										10

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CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: UNDERWAY REPLENISHMENT

MODELS OF SYSTEM AFFECTED: AOE STREAM MODERNIZATION (G0043)

DESCRIPTION/JUSTIFICATION: Replacement of 25 year old non-Navy Standard Equipment

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT					2				1										3	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT						3.6				1.1									0	4.7
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
																			0	0.0
FY96 EQUIPMENT & PRIOR																			0	0.0
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT			AP	0.07	AP	0.5	1	5.4	1	5.4									2	11.4
FY99 EQUIPMENT																				
FY 00 EQUIPMENT											1	4.7							1	4.7
FY01 EQUIPMENT																			0	0.0
FY02 EQUIPMENT																				
FY03 EQUIPMENT																				
TO COMPLETE																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST			AP	0.07	AP	0.5	1	5.4	1	5.4	1	4.7	0.0			0		0	3	16.1
TOTAL PROCUREMENT COST				0.0		3.6		0.0		1.1			0.0			0.0		0.0		4.7
TOTAL COST				0.1		4.1		5.4		6.5			0.0			0.0		0.0		20.8

METHOD OF IMPLEMENTATION: C | ADMINISTRATIVE LEADTIME: 3 | PRODUCTION LEADTIME: 18

CONTRACT DATE: | PRIOR YEAR: | CURRENT YEAR: | BUDGET YEAR: Jan-98 | BUDGET YEAR 3:

PRODUCTION DELIVER DATE: | PRIOR YEAR: | CURRENT YEAR: | BUDGET YEAR: Sep-99 | BUDGET YEAR 3:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
FY 96 & PRIOR									0
FY 97									0
FY 98				1	1				2
FY 99									0
FY 00						1			1
FY 01									0
FY 02									0
FY 03									0
TC									0
									3

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
FY 96 & PRIOR									0
FY 97									0
FY 98				1	1				2
FY 99									0
FY 00						1			1
FY 01									0
FY 02									0
FY 03									0
TC									O
									3

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CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: FUEL DELIVERY STATION

MODELS OF SYSTEM AFFECTED: UNDERWAY REPLENISHMENT SYSTEM (G0032)

DESCRIPTION/JUSTIFICATION: ENABLES AFS SHIPS TO DELIVER 7 INCH FUEL HOSE RIGS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																			0	0.0
QUANTITY	1																		1	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.3																	0	1.3
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	1	1.2																	1	1.2
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY02 EQUIPMENT																				
FY03 EQUIPMENT																				
TO COMPLETE																			0	0.0
																			0	0.0
TOTAL INSTALLATION COST		1.2		0		0		0		0		0		0		0		0	1	1.2
TOTAL PROCUREMENT COST		1.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.3
TOTAL COST		2.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		2.5

METHOD OF IMPLEMENTATION: C ADMINISTRATIVE LEADTIME: 9 PRODUCTION LEADTIME: 15

CONTRACT DATE: PRIOR YEAR: VAR CURRENT YEAR: BUDGET YEAR: 1 BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: VAR CURRENT YEAR: BUDGET YEAR: 1 BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY96 & PRIOR	1									1

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY96 & PRIOR		1								1

* PRIOR YEAR COLUMN INDICATES EQUIPMENT PRIOR TO FISCAL YEAR 93

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CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: UNDERWAY REPLENISHMENT

MODELS OF SYSTEM AFFECTED: DART VPC (G0024)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.0																	0	1.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR							AP	0.02	1	0.2	1	0.3	2	0.4					4	0.9
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
02 EQUIPMENT																			0	0.0
03 EQUIPMENT																			0	0.0
TO COMPLETE																				
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.02		0.2		0.3		0.4		0.0		0.0	4	0.9
TOTAL PROCUREMENT COST		1.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.0
TOTAL COST		1.0		0.0		0.0		0.01		0.2		0.3		0.8		0.0		0.0		1.9

METHOD OF IMPLEMENTATION: — ADMINISTRATIVE LEADTIME: 6 MONTHS — PRODUCTION LEADTIME: 12

CONTRACT DATE: — PRIOR YEAR: Jun-92 — CURRENT YEAR: N/A — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: — PRIOR YEAR: Jun-93 — CURRENT YEAR: N/A — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR					1	1	1 1			4
FY 97										
FY 98										
FY 99										
FY 01										
FY 02										
FY 03										
TC										4

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR					1	1	1	1		4
FY 97										
FY 98										
FY 99										
FY 01										
FY 02										
FY 03										
TC										4

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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40	DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY/BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE PERSICOPES & IMAGING EQUIPMENT/81PL/083100/083105

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (In Millions)	$23.9	$31.9	$32.1	$27.9	$22.8	$15.0	$14.0	$13.1

Service Approval - The Type 18 Periscope was approved for service use December 1972.

The Type 18 Periscope contains completely redesigned Electronic Surveillance Measure (ESM) and Optical Subsystems. The ESM provides improved sensitivity, reliability, and maintainability as well as frequency extension. The optical subsystem provides higher power and resolution (optimized for photography) and the eyepiece box is redesigned for built-in TV. Special electronics for low light level viewing are also provided. Type 18B Periscope Systems are installed on SSN 688 Class.

The Type 18 Periscope Inventory Objective is 65 units: (51 Type 18B). This is the quantity required for ship installation (51), spares (10), trainers (3), and (1) configuration model.

The Type 8B Mod 3 Periscope provides enhanced imaging and communications capabilities. The Type 8B Mod 3 Periscope replaces the Type 2 Periscope on SSN 688 Class Submarines. The Type 8B Mod 3 Periscope inventory objective is 51 units. This is the quantity required for ship installation (44), spares (5), trainers (1), and configuration control model (1).

PL001 - Procurement of Type 8B Mod 3 Periscopes began in FY 1991. The Type 8B Mod 3 replaces the Type 2 Periscope on SSN-688 Class Submarines and provides them with enhanced imaging and communications capabilities. Installations will be accomplished during routine upkeep periods.

PL006 - Imaging components are required to fully support Type 18 TV imaging, photographic, television, and ancillaries and upgrades. These equipments include 35 mm Cameras, High Resolution Video Cameras, Video and Photographic Screening Systems, AR-165B Readers/Printers, equipments that must be replaced.and ancillary components. These maintenance items support fleet requirements based on demand history, repair turn-around time, and casualties resulting from non-repairable equipments that must be replaced.

PL007 - Procurement of Type 18 Periscope Automatic Direction Finding (ADF) modifications will provide SSN 688 Class Submarines with an automatic direction finding capability. Installations will be accomplished during routine upkeep periods. Procurement quantities vary year to year based on projected submarine availabilities and availability of funding.

BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40	DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY/BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE PERSICOPES & IMAGING EQUIPMENT/81PL/083100/083105

PL011 - FY-1998/99 funding continues procurement of the following Type 18 Field Change Kits: 12 Channel Rotary Joint, Sleeve Antenna Amplifier Limiter Replacement, Outer Head Corrosion Protection, Right Training Handle Magnification Switch, RF improvements, Fairing Hoist Cylinder Dynamic Seal, Heated Head Window replacement, Drip Pan Assembly replacement, Cathodic Rod replacement, Fairing Closure Cap Seal, Laser Eye Protection, Hull Fitting Seal, Hoist Rod Cover and Hydraulic Noise Reduction.

PL012 - FY 1998/99 funds procure replacement Special Support Equipment (SSE) for each maintenance level to ensure systems are maintained in a state of operational readiness. Equipment includes dynamic collimator, eyebox/mast test set, and antenna/outer head simulator required due to obsolescence and age of existing Type 8 and 18 Periscope SSE.

PL015 - Funding is for interim contract support provided by the periscope manufacturer including Depot and Intermediate level repair of all types of tactical periscope equipment.

PL016 - Funding is for Type 8 and 18 periscope changes training including curriculum development, training materials, initial factory training pilot course conduct, and instructor advisory services.

PL017 - FY 1998/99 funding provides for the repair or replacement of periscope E&E Adapter shipping containers which provide security and protection for the periscope E&E Adapter.

PL018 - FY 1998/99 funding provides for the repair or replacement of periscope eyepiece box shipping containers which provide security and protection for the periscope eyepiece box.

PL019 - FY1998/99 funding provides for the repair or replacement of periscope shipping containers which provide security and protection for the periscope.

PL830 - Production Engineering funds provide the following functions: value engineering; review and evaluation of production design data and documentation; production configuration control; maintenance engineering efforts designed and incorporated into the production manufacturing process, and other related engineering functions that are integral to all of the Type 8 and 18 items manufactured.

PL5IN - Funding is for the installation of Fleet Modernization Program Equipment only.

PL6IN - Funding is for the installation of Non Fleet Modernization Program Equipment only.

PLDSA - The budget reflects the transfer of design services into the appropriate equipment P1 line item beginning in FY 98.

WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5

DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY/BA-1:
SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
SUBMARINE PERSICOPES & IMAGING EQUIPMENT/81PL/083100/083105

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
PL001	TYPE 8B MOD 3 PERISCOPE (SSN)	A	7	$7,679	7	$7,848	10	$11,278	9	$10,374
PL006	TYPE 18 IMAGING COMPONENTS	A		1,761		2,186		1,517		6,104
PL007	TYPE 18 PERISCOPE ADF MOD	A	2	2,278	4	4,656	7	7,879		0
PL011	PERISCOPE FIELD CHANGE KITS	A		1,758		1,501		877		1,054
PL012	PERISCOPE SPECIAL SPT EQUIPMENT	A		588		1,100		445		455
PL015	PERISCOPE INTERIM CONTRACT SPT	A		3,447		3,465		3,531		3,683
PL016	PERISCOPE TRAINING	A		130		131		50		52
PL017	PERISCOPE E&E ADAPT SHIP CONTNRS	A		36		0		38		0
PL018	PERISCOPE EPB SHIP CONTAINERS	A		9		0		9		0
PL019	PERISCOPE SHIPPING CONTAINERS	A		60		0		63		0
PL830	PERISCOPE PRODUCTION ENGR.	A		$2,818		$2,881		$2,285		$2,566
PL900	CONSULTING SERVICES	A		818		836		663		873

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WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5

DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY/BA-1:
SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
SUBMARINE PERSICOPES & IMAGING EQUIPMENT/81PL/083100/083105

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
PLXXX	APX-100 IFF RECEIVERS	A		0		2,822		0		0
PL5IN	FMP INSTALLATIONS	A		2,184		3,051		1,681		1,656
PL6IN	NON-FMP INSTALLATIONS	A		326		1,405		1,361		643
PLDSA	Design Services Allocation FMP							454		460
	GRAND TOTAL			$23,892		$31,882		$32,131		$27,920

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BUDGET PROCUREMENT HISTORY AND PLANNING
EXHIBIT P-5A
($000)

DATE: **February 1997**

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY/BA-1:
SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
SUBMARINE PERSICOPE & IMAGING EQUIPMENT/81PL

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
PL001	**TYPE 8B MOD 3 PERISCOPE**										
	FY96	UNKNOWN	WX	NUWC	12/95	02/97	7	$1,097.0	YES	NO	
	FY97	UNKNOWN	WX	NUWC	12/96	02/98	7	$1,121.1	YES	NO	
	FY98	UNKNOWN	WX	NUWC	12/97	02/99	10	$1,127.8	YES	NO	
	FY99	UNKNOWN	WX	NUWC	12/98	02/00	9	$1,152.7	YES	NO	
PL007	**TYPE 18 PER ADF MOD**										
	FY96	UNKNOWN	WX	NUWC	12/95	12/96	2	$1,139.0	YES	NO	
	FY97	UNKNOWN	WX	NUWC	12/96	12/97	4	$1,164.0	YES	NO	
	FY98	UNKNOWN	WX	NUWC	12/97	12/98	7	$1,125.6	YES	NO	

REMARKS:
ALL FUNDING PROVIDED TO NUWC WILL BE ACCEPTED ON A REIMBURSABLE BASIS; THEREFORE, CONTRACTOR WILL BE "UNKNOWN".

P3A INDIVIDUAL MODIFICATION
SUBMARINE PERISCOPE & IMAGING EQUIPMENT/81PL/083100/083105
MODIFICATION TITLE: SUBMARINE PERISCOPES & IMAGING EQUIPMENT
MODELS OF SYSTEM AFFECTED: TYPE 8B MOD3 PERISCOPE, 3803,PL001
DESCRIPTION/JUSTIFICATION: Provides EHF Satellite Communications

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (IN MILLIONS)	QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.000
PROCUREMENT	23	47.419	7	7.848	10	11.278	9	10.374	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	49	76.919
QUANTITY																			0	0.000
INSTALLATION KITS																			0	0.000
INSTALLATION KITS NONRECURRING																			0	0.000
EQUIPMENT	20	42.592	4	4.485	10	11.278	4	4.611	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	38	62.966
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT (1)	1	2.680	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	2.680
SUPPORT EQUIPMENT; CONFIGURATION MODEL (1)	0	0.000	0	0.000	0	0.000	1	1.153	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	1.153
OTHER: TRIDENT PAYBACKS (6)	2	2.147	0	0.000	0	0.000	2	2.305	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	4	4.452
OTHER: SPARES (5)	0	0.000	3	3.363	0	0.000	2	2.305	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	5	5.668
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT AND PRIOR	13	3.795	7	2.771															20	6.566
FY97 EQUIPMENT					4	1.824													4	1.824
FY98 EQUIPMENT							3	1.689	7	3.759									10	5.448
FY99 EQUIPMENT									4	2.148									4	2.148
FY00 EQUIPMENT																			0	0.000
FY01 EQUIPMENT																			0	0.000
FY02 EQUIPMENT																			0	0.000
FY03 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000
NOTE: THE TOTAL PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM																			0	0.000
TOTAL INSTALLATION COST	13	3.795	7	2.771	4	1.824	3	1.689	11	5.907	0	0.000	0	0.000	0	0.000	0	0.000	38	15.986
TOTAL PROCUREMENT COST	23	47.419	7	7.848	10	11.278	9	10.374	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	49	76.919
TOTAL COST		51.214		10.619		13.102		12.063		5.907		0.000		0.000		0.000		0.000	0	92.905

METHOD OF IMPLEMENTATION: AITs ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 14 MONTHS

CONTRACT DATE:	PRIOR YEAR:	12/95	CURRENT YEAR:	12/96	BUDGET YEAR 1:	12/97	BUDGET YEAR 2: 12/98
PRODUCTION DELIVER DATE:	PRIOR YEAR:	2/97	CURRENT YEAR:	2/98	BUDGET YEAR 1:	2/99	BUDGET YEAR 2: 2/00

INSTALLATION SCHEDULE:

INPUT =======>	FY96/PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1 ,2 ,3 ,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	7,3,2,1	0,2,5,0								20
FY97			0,2,2,0							4
FY98				0,1,2,0	3,3,1,0					10
FY99					0,3,1,0					4
FY00										0
FY01										0
FY02										0
FY03										0

OUTPUT =====>	FY96/PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1 ,2 ,3 ,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	7,3,2,1	0,0,2,5								20
FY97			0,0,2,2							4
FY98				0,0,1,2	0,4,3,0					10
FY99					0,0,1,3					4
FY00										0
FY01										0
FY02										0
FY03										0

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P3A INDIVIDUAL MODIFICATION
SUBMARINE PERISCOPE & IMAGING EQUIPMENT/81PL/083100/083105
MODIFICATION TITLE: SUBMARINE PERISCOPES & IMAGING EQUIPMENT
MODELS OF SYSTEM AFFECTED: TYPE 18B PERISCOPE, ADF, 3724, PL007
DESCRIPTION/JUSTIFICATION: Provides wide bandwidth reception and instantaneous direction finding.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (IN MILLIONS)	QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.000
PROCUREMENT	45	42.705	4	4.656	7	7.879													56	55.240
QUANTITY																			0	0.000
INSTALLATION KITS																			0	0.000
INSTALLATION KITS NONRECURRING																			0	0.000
EQUIPMENT	35	33.215	4	4.656	7	7.879													46	45.750
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT	3	2.847																	3	2.847
SUPPORT EQUIPMENT (CCM, SWING SETS)	4	3.796																	4	3.796
OTHER (LBU/GFE)	3	2.847																	3	2.847
INTERIM CONTRACTOR SUPPORT																			0	0.000
																			0	0.000
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT AND PRIOR	42	2.940	7	0.280	2	0.104	1	0.053	2	0.120									54	3.497
FY97 EQUIPMENT					4	0.207													4	0.207
FY98 EQUIPMENT							7	0.374											7	0.374
FY99 EQUIPMENT																			0	0.000
FY00 EQUIPMENT																			0	0.000
FY01 EQUIPMENT																			0	0.000
FY02 EQUIPMENT																			0	0.000
FY03 EQUIPMENT																			0	0.000
TO COMPLETE																				
NOTE: THE TOTAL PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM																				
NOTE: FY 96 EQUIPMENT AND PRIOR ASSETS INCLUDE FORMER GFE UNITS AND ASSETS FROM DECOMMISSIONING BOATS.																			0	0.000
TOTAL INSTALLATION COST	42	2.940	7	0.280	6	0.311	8	0.427	2	0.120	0	0.000	0	0.000	0	0.000	0	0.000	65	4.078
TOTAL PROCUREMENT COST	45	42.705	4	4.656	7	7.879	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	56	55.240
TOTAL COST		45.645		4.936		8.190		0.427		0.120		0.000		0.000		0.000		0.000	0	59.318

METHOD OF IMPLEMENTATION: AITs ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATE:	PRIOR YEAR:	12/95	CURRENT YEAR:	12/96	BUDGET YEAR 1:	12/97	BUDGET YEAR 2:
PRODUCTION DELIVER DATE:	PRIOR YEAR:	12/96	CURRENT YEAR:	12/97	BUDGET YEAR 1:	12/98	BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96/PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1 ,2 ,3 ,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	36,0,2,4	4,2,1,0	2,0,0,0	1,0,0,0	0,0,2,0					54
FY97			3,1,0,0							4
FY98				3,4,0,0						7
FY99										
FY00										
FY01										
FY02										
FY03										

OUTPUT =====>	FY96/PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1 ,2 ,3 ,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	36,0,2,4	2,2,1,0	0,2,00	1,0,0,0	0,0,2,0					54
FY97			0,0,2,2							4
FY98				1,2,2,2						7
FY99										
FY00										
FY01										
FY02										
FY03										

NOTE: FY-96 EQUIPMENT AND PRIOR ASSETS INCLUDE FORMER GFE AND ASSETS FROM DECOMMISSIONING BOATS.

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P3A INDIVIDUAL MODIFICATION
SUBMARINE PERISCOPE & IMAGING EQUIPMENT/81PL
MODIFICATION TITLE: SUBMARINE PERISCOPES & IMAGING EQUIPMENT
MODELS OF SYSTEM AFFECTED: SSIXS ANTENNA, PL008
DESCRIPTION/JUSTIFICATION: Provides broadcast reception for the Type 18 Periscope with a UHF reception capability

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (IN MILLIONS)	QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.000
PROCUREMENT	5	0.467																	5	0.467
QUANTITY																			0	0.000
INSTALLATION KITS																			0	0.000
INSTALLATION KITS NONRECURRING																			0	0.000
EQUIPMENT	4	0.372																	4	0.372
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT																			0	0.000
SUPPORT EQUIPMENT																			0	0.000
OTHER; SPARE	1	0.095																	1	0.095
INTERIM CONTRACTOR SUPPORT																			0	0.000
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT AND PRIOR	4	0.262																	4	0.262
FY97 EQUIPMENT																			0	0.000
FY98 EQUIPMENT																			0	0.000
FY99 EQUIPMENT																			0	0.000
FY00 EQUIPMENT																			0	0.000
FY01 EQUIPMENT																			0	0.000
FY02 EQUIPMENT																			0	0.000
FY03 EQUIPMENT																			0	0.000
TO COMPLETE																				
NOTE: THE TOTAL PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM																			0	0.000
TOTAL INSTALLATION COST	4	0.262	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	4	0.262
TOTAL PROCUREMENT COST	5	0.467	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	5	0.467
TOTAL COST		0.729		0.000		0.000		0.000		0.000		0.000		0.000		0.000		5.950		6.679

METHOD OF IMPLEMENTATION: AITs ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATE:	PRIOR YEAR:	CURRENT YEAR:	BUDGET YEAR 1:	BUDGET YEAR 2:	
PRODUCTION DELIVER DATE:	PRIOR YEAR:	CURRENT YEAR:	BUDGET YEAR 1:	BUDGET YEAR 2:	

INSTALLATION SCHEDULE:

INPUT =======>	FY96/PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1 ,2 ,3 ,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	0,0,1,0									1
FY97										
FY98										
FY99										
FY00										
FY01										
FY02										
FY03										

OUTPUT =====>	FY96/PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1 ,2 ,3 ,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	0,0,0,1									1
FY97										
FY98										
FY99										
FY00										
FY01										
FY02										
FY03										

P3A INDIVIDUAL MODIFICATION
SUBMARINE PERISCOPE & IMAGING EQUIPMENT/81PL
MODIFICATION TITLE: SUBMARINE PERISCOPES & IMAGING EQUIPMENT
MODELS OF SYSTEM AFFECTED: PERISCOPE FCK, PL011
DESCRIPTION/JUSTIFICATION: Provides obsolescence related upgrades to the Type 18 Periscope

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (IN MILLIONS)	QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.000
PROCUREMENT	296	2.014	239	1.501	174	0.877	197	1.054	198	0.506	236	1.158	173	1.300	237	1.329	VAR	0.000	1750	9.739
QUANTITY																			0	0.000
INSTALLATION KITS																			0	0.000
INSTALLATION KITS NONRECURRING																			0	0.000
EQUIPMENT	296	2.014	239	1.501	174	0.877	197	1.054	198	0.506	236	1.158	173	1.300	237	1.329	VAR	0.000	1750	9.739
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT																			0	0.000
SUPPORT EQUIPMENT																			0	0.000
OTHER																			0	0.000
INTERIM CONTRACTOR SUPPORT																			0	0.000
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT AND PRIOR	96	0.386	200	1.163															296	1.549
FY97 EQUIPMENT					239	1.361													239	1.361
FY98 EQUIPMENT							174	0.643											174	0.643
FY99 EQUIPMENT									197	2.646									197	2.646
FY00 EQUIPMENT											198	0.941							198	0.941
FY01 EQUIPMENT													236	0.664					236	0.664
FY02 EQUIPMENT															173	0.662			173	0.662
FY03 EQUIPMENT																	237	0.906	237	0.906
TO COMPLETE																			VAR	0.000
NOTE: THE TOTAL PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM																				
TOTAL INSTALLATION COST	96	0.386	200	1.163	239	1.361	174	0.643	197	2.646	198	0.941	236	0.664	173	0.662	237	0.906	1750	9.372
TOTAL PROCUREMENT COST	296	2.014	239	1.501	174	0.877	197	1.054	198	0.506	236	1.158	173	1.300	237	1.329	0	0.000	1750	9.739
TOTAL COST		2.400		2.664		2.238		1.697		3.152		2.099		1.964		1.991		0.600		18.805

METHOD OF IMPLEMENTATION: AITs ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATE:	PRIOR YEAR:	12/95	CURRENT YEAR:	12/96	BUDGET YEAR 1:	12/97	BUDGET YEAR 2:	12/98
PRODUCTION DELIVER DATE:	PRIOR YEAR:	12/96	CURRENT YEAR:	12/97	BUDGET YEAR 1:	12/98	BUDGET YEAR 2:	12/99

INSTALLATION SCHEDULE:

INPUT =======>	FY96/PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1 ,2 ,3 ,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	24,24,24,24	50,50,50,50								296
FY97			60,60,60,59							239
FY98				43,43,44,44						174
FY99					49,49,49,50					197
FY00						49,49,50,50				198
FY01							59,59,59,59			236
FY02								43,43,43,44		173
FY03									59,59,59,60	237

OUTPUT =====>	FY96/PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1 ,2 ,3 ,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	24,24,24,24	50,50,50,50								296
FY97			60,60,60,59							239
FY98				43,43,44,44						174
FY99					49,49,49,50					197
FY00						49,49,50,50				198
FY01							59,59,59,59			236
FY02								43,43,43,44		173
FY03									59,59,59,60	237

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET **P-40**	**DATE:** **FEBRUARY 1997**

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**
OTHER PROCUREMENT NAVY BA 1: SHIP SUPPORT EQUIPMENT	**FIRE FIGHTING EQUIPMENT 81HB/0910**

	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	**$15.3**	**$9.0**	**$14.1**	**$16.5**	**$17.3**	**$10.6**	**$9.4**	**$6.7**

CNO, Surface Ship Survivability Flag Level Committee, and top echelons of the Navy directed that a number of survivability improvements be incorporated into mission essential ship and combat systems during their acquisition and modernization. Shipboard fires have emphasized the urgent need to upgrade features and design standards that contribute to survivability.

The Fire Fighters Breathing Apparatus (FFBA) (HB008) is a self-contained, compressed air breathing device compatible with the fire fighter protective wear and helmet, and other damage control equipment. The FFBA is a commercially available device which has been tested and certified by the National Institute for Occupational Safety and Health (NIOSH) and is in accordance with the National Fire Protection Association (NFPA) Standard 1981 for a fire fighter's breathing apparatus.

The FFBA will provide breathable air to the fire fighter for a longer period of time than the OBA, with fewer physical demands on the user. It will provide air at a rate satisfying requirements of the user for duration of up to one hour. Equipment supporting the FFBA includes: booster pumps for ships with HP air system, portable diesel compressors for all ships when ships power is lost and portable electric compressors for recharging purposes for all ships (ships with HP air systems when HP air is down and all other ships as primary source of recharge air) and a filter kit which provides breathing quality air to the booster pumps/compressors for use in recharging the FFBA air cylinders.

INSTALLATION OF EQUIPMENT- HB5IN:
Funding is for installation of equipment including Fleet Modernization Program installations, installation of training equipment, and installation of equipment in other shore facilities.

HBDSA - The Budget reflects the transfer of design services allocation into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.

CLASSIFICATION: **UNCLASSIFIED**

WEAPON SYSTEMS COST ANALYSIS EXHIBIT (P-5)	PROGRAM COST BREAKDOWN	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPME	P-1 ITEM NOMENCLATURE/SUBHEAD FIREFIGHTING EQUIPMENT 81HB/0910	

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	SURFACE (N86)									
HB008	BREATHING APPARATUS								13	2,468
HB830	PRODUCTION ENGINEERING			385				174		95
	SUBTOTAL N86			385				174		2,563
	TOTAL EQUIPMENT									2,563
HB5IN	INSTALLATION OF EQUIPMENT			14,904		8,984		11,300		11,600
HBDSA	DESIGN SERVICES ALLOCATION							2,607		2,318
	TOTAL INSTALLATION							13,907		13,918
	GRAND TOTAL			15,289		8,984		14,081		16,481

Exhibit P-5A Procurement History and Planning	BUDGET PROCUREMENT HISTORY AND PLANNING P-5A	DATE FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EUQIPMENT	P-1 ITEM NOMENCLATURE FIRE FIGHTING	SUBHEAD 81HB/0910

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	N86										
HB008	FIRE FIGHTERS BREATHING APPARATUS										
	FY 1999	DDNSWC, CSS, FL	RCP	DDNSWC	Jan-99	Apr-99	13	189,846	YES	NO	

REMARKS

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

MODELS OF SYSTEM AFFECTED: HALON (HB001)

Halon 1301 Firefighting Systems Include New Time Delays, Liquid Level Indicator Halon/1301 Conservation

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		2.6																	0	2.6
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR		8.7		1.2		6.4		0.9		0.1		0.9		1.7		1.7			0	21.6
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02																			0	0.0
FY 03 EQUIPMENT																				
TO COMPLETE																				
TOTAL INSTALLATION COST		8.7		1.2		6.4		0.9		0.1		0.9		1.7		1.7		0.0		21.6
TOTAL PROCUREMENT COST		2.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		2.6
TOTAL COST		11.3		1.2		6.4		0.9		0.1		0.9		1.7		1.7		0.0		24.2

METHOD OF IMPLEMENTATION: VAR ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:

CONTRACT DATE: VAR PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

INSTALLATION SCHEDULE:

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
INPUT =======>	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY00	FY01	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION FEBRUARY 1997

MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

MODELS OF SYSTEM AFFECTED: AFFF IMPROVED FIREFIGHTING (HB005)

DESCRIPTION/JUSTIFICATION: Hardware such as Manual Hydraulic Control Valve, Verinozzle Bridge Panels and Sanitary Solid Block for Storage

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 96 & PRIOR QTY	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																		VAR	0.0
PROCUREMENT																		0	0.0
QUANTITY																		0	0.0
INSTALLATION KITS																		0	0.0
INSTALLATION KITS NONRECURRING																		0	0.0
EQUIPMENT	9.1																	0	9.1
EQUIPMENT NONRECURRING																		0	0.0
ENGINEERING CHANGE ORDERS																		0	0.0
DATA																		0	0.0
TRAINING EQUIPMENT																		0	0.0
SUPPORT EQUIPMENT																		0	0.0
OTHER																		0	0.0
INTERIM CONTRACTOR SUPPORT																		0	0.0
INSTALLATION OF HARDWARE																			
FY96 EQUIPMENT	6.2		7.8		7.5		8.0		7.0		5.5		3.8		5.0			0	50.8
FY97 EQUIPMENT																		0	0.0
FY98 EQUIPMENT																		0	0.0
FY99 EQUIPMENT																		0	0.0
FY 00 EQUIPMENT																		0	0.0
FY 01 EQUIPMENT																		0	0.0
FY 02																		0	0.0
FY 03																			0.0
TO COMPLETE																			
TOTAL INSTALLATION COST	6.2		7.8		7.5		8.0		7.0		5.5		3.8		5.0		0.0		50.8
TOTAL PROCUREMENT COST	9.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		9.1
TOTAL COST	15.3		7.8		7.5		8.0		7.0		5.5		3.8		5.0		0.0		59.9

METHOD OF IMPLEMENTATION: VAR ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:

CONTRACT DATE: VAR PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

PRODUCTION DELIVER DATE: VAR PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

INSTALLATION SCHEDULE:

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
INPUT =======>	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION **FEBRUARY 1997**

MODIFICATION TITLE: FIREFIGHTING EQUIPMENT
MODELS OF SYSTEM AFFECTED: FIRE FIGHTER'S BREATHING APPARATUS (FFBA) HB008
DESCRIPTION/JUSTIFICATION: Breathing Apparatus, stowage lockers, recharging Air Compressors and Booster are recharging equipment
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES III, JULY 1996

FINANCIAL PLAN (IN MILLIONS)	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																		0	0.0
PROCUREMENT																		0	0.0
QUANTITY						13		15		2		1						31	0.0
INSTALLATION KITS																		0	0.0
INSTALLATION KITS NONRECURRING																		0	0.0
EQUIPMENT							2.5		3.9		1.2		1.2					0	8.8
EQUIPMENT NONRECURRING																		0	0.0
ENGINEERING CHANGE ORDERS																		0	0.0
DATA																		0	0.0
TRAINING EQUIPMENT																		0	0.0
SUPPORT EQUIPMENT																		0	0.0
OTHER																		0	0.0
INTERIM CONTRACTOR SUPPORT																		0	0.0
INSTALLATION OF HARDWARE																			
FY96 EQUIPMENT & PRIOR																		0	0.0
FY97 EQUIPMENT																		0	0.0
FY98 EQUIPMENT																		0	0.0
FY99 EQUIPMENT						13	5.0											13	5.0
FY 00 EQUIPMENT								15	6.3									15	6.3
FY01 EQUIPMENT										1	1.9	1	1.4					2	3.3
FY 02 EQUIPMENT												1	1.3					1	1.3
FY 03																			
TO COMPLETE																			
TOTAL INSTALLATION COST	0.0		0.0		0.0		5.0		6.3		1.9		2.7					31	15.9
TOTAL PROCUREMENT COST	0.0		0.0		2.5		2.5		3.9		1.2		1.2						11.3
TOTAL COST	0.0		0.0		2.5		7.5		10.2		3.1		3.9						27.2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 MOS. PRODUCTION LEADTIME: 3 MOS.
CONTRACT DATE: YEAR PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2: JAN 99
PRODUCTION DELIVER DATE YEAR PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2: APR 99

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY 02	FY 03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR										0
FY 97										13
FY 98				13						15
FY 99					15					2
FY 00						1	1			1
FY 01										31
FY 02										
FY 03										
TC										

OUTPUT =====>	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY 02	FY 03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR											0
FY 97											13
FY 98					13						15
FY 99						15					2
FY 00							1	1			1
FY 01											31
FY 02											
FY 03											
TC											

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OPN BA-1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE COMMAND AND CONTROL SWITCHBOARDS 81GE BLI : 0925000			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST	$4.6	$6.8	$8.0	$8.1	$10.7	$6.2	$5.1	$5.2

The Switchboard program provides mission critical switching capability required to link shipboard combat equipment including weapons, launchers, sensors, computers and navigation equipment. In essence, switchboards serve as the central connection point for most elements of combat and weapon systems, interior communications, data transfer, and command and control systems. They are designed to accommodate either analog or digital interfaces or a combination of both. In total, this budget item supports approximately 161 ships and 1,024 installed Switchboards throughout the acquisition life cycle.

Functions include: data routing; action cutout; test and operating mode selection (including casualty back-up modes); power monitoring and control; circuit protection; peripheral equipment isolation; and signal processing, frequency conversion amplification and switching. In summary, the primary purpose is to provide systems intra and interface compatibility.

Changes in other elements of the Combat and IC Systems will frequently mandate either conjunctive modification to switchboards via Ordnance Alteration/Field Change or partial or complete replacement of existing switchboards. Typical switchboard mods include hardware/field change kits, ORDALT instructions, technical manual updates and revisions to other supporting documentation. Such changes are usually required subsequent to the initial installation, either in the same or later ship overhauls or availability. New Switchboards are normally installed during a regular overhaul by a shipyard.

Command and Control Switchboards are currently installed on and are required for almost all surface combatants and amphibious warfare ships. Individual switchboard unit cost varies from ship to ship, depending upon size, complexity, and whether analog or digital interfaces or some combination thereof are utilized. Modifications to existing switchboards via ORDALTs or Field Changes are quantified by kits or change packages rather than individual units. Switchboard hardware is normally procured by the Invitation for Bids (IFB) process, from manufacturers on Qualified Products List (QPL)-17000. There are currently six companies listed on QPL-17000. All contracts awarded are competitive, fixed price.

PUC GE001 - Reliability, Maintainability, & Availability (RMA): Evaluate product improvement proposals designed to improve switching capability and availability, upgrade unreliable components and replace obsolete parts and items no longer in production.

PUC GE002 - Microprocessor/Fiber Optic Interface: Procure advanced technology switching devices such as the touchscreen microprocessor based Computer Switching Control Panel (CSCP). This upgrade meets NAVSEA affordability issues and is lighter, smaller and more easily adaptable for future system upgrades or configuration changes. Such upgrades will then require only Erasable Programmable chip changes as opposed to ORDALTs and mechanical switching as they do now, consequently lowering the lifecycle cost of these items. The microprocessor CSCP is a Non-Developmental Item (NDI) with built-in commercial off the shelf (COTS) components that will communicate with the command and control switchboard via copper or fiber optic cable. Non-recurring costs to design and develop a drawing and spec package (referenced in PUC GE003) to interface/integrate this unit into multiple switchboard configurations is reflected in FY 96-98 ($250,000, $360,000 and $300,000, respectively).Total objective is 60 units for DD 963, FFG, DDG 993, LHD, LHA and CV/CVN Class ships at an estimated cost of $100,000/unit starting in FY 98.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE COMMAND AND CONTROL SWITCHBOARDS 81GE BLI : 0925000

PUC GE003 - Design, TM & MODs: This line covers the non-recurring costs to modify an existing or prepare a new design drawing and spec package to implement the switching scheme necessary for a ship's switchboard to properly integrate all elements of the Combat System. The design package is used to procure hardware modification kits (ORDALTs or Field Changes) and contains one or more of the following:
- Build-to-print drawings used in the manufacturing of hardware items.
- Installation control drawings .
- System test procedures.
- Technical/tactical operation manuals.

Additionally, Design Engineering and kit development for unauthorized modifications to Switchboard equipment will be covered under this line and will follow the criteria mentioned above to produce a drawing and spec package necessary to document the unauthorized change. The non-recurring costs associated with the design and production of the Microprocessor CSCP is not covered here but rather in PUC GE002.

PUC GE004, GE005, GE006, GE066, GE067, GE068, GE069: Provides for new switching requirements mandated in SHIPALTS, ORDALTS, and/or Warfare Improvement Plan (WIP)/Warfare Improvement Program Execution (WIPE) documents. Procure conjunctive switchboard ORDALTs, Engineering Changes and Field Changes for various combat system element upgrades including ACDS, BFTT, RAIDS, RAM, SSDS, SLQ 32 Upgrade, NTCS-A Jots II, EHF SATCOM, SPQ 9(B), RADDS, Enhanced OBT, C2P/JTIDS, INMARSAT, LAMPS MK III, NAVSSI and UYK 43 Upgrades. The total objective to support the mandated SHIPALTS and ORDALTS varies in quantity and cost per ship class. These quantities are established as the requirements are defined. The eighth and final DD 963 Class MK 59 ICSS Switchboard was procured in FY 1995 for $395,000 (GE006). This board will not be installed on the DD 963 as planned. The MK 59 ICSS is configured for VLS while the DD 963 is incompatible with this configuration (non-VLS) and therefore will be designated as a battle spare. There were seven previous switchboard procurements; five (5) in FY 91 and two (2) in FY 93. Additionally, this line allows for the procurement of ORDALTs resulting from Engineering Change Proposals to fix equipment modified through unauthorized Switchboard modifications.

PUC GE830 - Production Engineering: Provide quality assurance oversight and burn-in testing of production switchboards and switching equipment. Monitor contractor compliance of manufacturing to as built drawings and delivery schedules.

PUC GE831 - Procure a panel mounted Solid State Synchro Signal Converter (SSSSC). Two production prototype units were developed in prior years. The SSSC provides signal amplification and conversion. This technology also provides an Analog to Digital conversion capability and a LAN/Fiber Optic interface capability for systems planned in the near future. The total objective to support upgrades is 25 units at an estimated unit cost of $10,000 each beginning in FY 98.

PUC GE950 - This program supports material procurement of engineering solutions developed as part of the LHA Mid-life maintenance upgrade program. This program is a joint OPNAV, CINCLANTFLT, SURFLANT, CINCPACFLT, and SURFPAC initiative to resolve maintenance deficiencies, increase readiness, and reduce future maintenance costs enabling the ships to reach their service life.

PUC GEINS - FY 95 and outyear installation funding identified supports installation of ORDALTs/Enhancements/Upgrades for C&C Switchboards and new Switchboards installed via Ship Alteration (SHIPALT). This program also supports installation of engineering solutions developed as part of the LHA Mid-life maintenance upgrade program. The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.

WEAPON SYSTEM COST ANALYSIS

EXHIBIT (P-5)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
OPN BA-1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
COMMAND AND CONTROL SWITCHBOARDS 81GE

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
GE001	RMA							50		50
GE002	Microprocessor/Fiber Optic Interface			250		360	5	800	7	700
GE003	C & C SWBDs Design, TM & MODs	A		2,852		2,288		1,975		2,080
GE004	DDG 993 ORDALTs/Field Changes	A		171		75		15		20
GE005	CG ORDALTS/Field Changes	A		50		35		143		150
GE006	DD 963 SWBDs, ORDALTs/Field Changes	A		394		371		375		400
GE066	CGN ORDALTs/Field Changes	A		50		25		12		15
GE067	LHA, LCC, LHD ORDALTs/Field Changes	A		100		70		210		225
GE068	FFG SWBDs, ORDALTs /Field Changes	A		435		367		93		95
GE069	CV/CVN ORDALTs/Field Changes	A		50		60		247		250
GE830	Production Engineering					50		75		75
GE831	Solid State Synchro Signal Converter									
GE900	Consulting Services									
GE950	Interior Voice Network-LHA Mid-life Upgrade				1	2,791	1	2,783	1	2,825
GEINS	Installation (C&C SWBDs/IVN)*			276		289		1,271		1,229
				$4,628		$6,781		$8,049		$8,114

*The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

DATE: **FEBRUARY 1997**

APPROPRIATION/BUDGET ACTIVITY: **OPN BA-1: SHIPS SUPPORT EQUIPMENT**

P-1 ITEM NOMENCLATURE: **COMMAND AND CONTROL SWITCHBOARDS**

SUBHEAD: **81GE**

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	FY 1997										
GE950	Interior Voice Network	TBD	FFP	NAVSEA	TBD	TBD	1	2,791	NO	YES	12-95
	FY 1998										
GE002	Microprocessor/Fiber Optic	TBD	FFP	PHD NSWC	TBD	TBD	5	100	NO	YES	6-97
GE950	Interior Voice Network	TBD	FFP	NAVSEA	TBD	TBD	1	2,783	NO	YES	12-95
	FY 1999										
GE002	Microprocessor/Fiber Optic	TBD	FFP	PHD NSWC	TBD	TBD	7	100	NO	YES	6-97
GE950	Interior Voice Network	TBD	FFP	NAVSEA	TBD	TBD	1	2,825	NO	YES	12-95

REMARKS

P3A

MODIFICATION TITLE: C&C SWBDs (81GE) - ORDALTs & FIELD CHANGES (GE001, GE003-GE006, GE066-GE069, GE830, GE900, GEINS)

MODELS OF SYSTEM AFFECTED: DD 993/DD 963/CG/CGN/LHA/LCC/LHD/FFG

DESCRIPTION/JUSTIFICATION: ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & Prior	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.000
PROCUREMENT																			429	36.062
QUANTITY																			0	0.000
INSTALLATION KITS	111	2.392	40	1.003	44	1.095	46	1.155	47	1.170	47	1.170	47	1.200	47	1.248			429	10.433
INSTALLATION KITS NONRECURRING		6.783		2.338		2.100		2.205		2.363		2.361		3.048		3.087			0	24.285
EQUIPMENT																			0	0.000
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT																			0	0.000
SUPPORT EQUIPMENT																			0	0.000
OTHER																			0	0.000
INTERIM CONTRACTOR SUPPORT		1.344																	0	1.344
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	55	0.276	48	0.289	8	0.048													111	0.613
FY97 EQUIPMENT					40	0.240													40	0.240
FY98 EQUIPMENT					5	0.028	35	0.207	4	0.024									44	0.259
FY99 EQUIPMENT									26	0.157	20	0.120							46	0.277
FY00 EQUIPMENT											12	0.070	35	0.210					47	0.280
FY01 EQUIPMENT													21	0.128	26	0.156			47	0.284
FY02 EQUIPMENT															36	0.213	11	0.066	47	0.279
FY03 EQUIPMENT																	47	0.300	47	0.300
TO COMPLETE																			0	0.000
TOTAL INSTALLATION COST		0.276		0.289		0.316		0.207		0.181		0.190		0.338		0.369		0.366	429	2.532
TOTAL PROCUREMENT COST		10.519		3.341		3.195		3.360		3.533		3.531		4.248		4.335		0.000		36.062
TOTAL COST		10.795		3.630		3.511		3.567		3.714		3.721		4.586		4.704		0.366		38.594

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: N/A — PRODUCTION LEADTIME: N/A

CONTRACT DATE: N/A — PRIOR YEAR: N/A — CURRENT YEAR: N/A — BUDGET YEAR: N/A — BUDGET YEAR 2: N/A

PRODUCTION DELIVER DATE: N/A — PRIOR YEAR: N/A — CURRENT YEAR: N/A — BUDGET YEAR: N/A — BUDGET YEAR 2: N/A

INSTALLATION SCHEDULE:

	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	TC	
INPUT =======>	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
				VARIOUS ORDALTS						
OUTPUT =====>	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
				VARIOUS ORDALTS						

* Advanced Planning

P3A

MODIFICATION TITLE: C&C SWBDs (81GE) - Microprocessor/Fiber Optic Interface (GE002)

MODELS OF SYSTEM AFFECTED: DD 993/DD 963/CGN/LHA/LCC/LHD/FFG

DESCRIPTION/JUSTIFICATION: ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & Prior	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.000
PROCUREMENT																			60	6.910
QUANTITY																			0	0.000
INSTALLATION KITS																			0	0.000
INSTALLATION KITS NONRECURRING																			0	0.000
EQUIPMENT					5	0.500	7	0.700	5	0.500	5	0.500	5	0.500	5	0.500	28	2.800	60	6.000
EQUIPMENT NONRECURRING		0.250		0.360		0.300													0	0.910
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT																			0	0.000
SUPPORT EQUIPMENT																			0	0.000
OTHER																			0	0.000
INTERIM CONTRACTOR SUPPORT																			0	0.000
INSTALLATION OF HARDWARE																				
FY95 EQUIPMENT & PRIOR																			0	0.000
FY96 EQUIPMENT																			0	0.000
FY97 EQUIPMENT																			0	0.000
FY98 EQUIPMENT							5	0.025											5	0.025
FY99 EQUIPMENT									7	0.035									7	0.035
FY00 EQUIPMENT											5	0.025							5	0.025
FY01 EQUIPMENT													5	0.025					5	0.025
FY02 EQUIPMENT															5	0.025			5	0.025
TO COMPLETE																	33	0.165	33	0.165
TOTAL INSTALLATION COST		0.000		0.000		0.000		0.025		0.035		0.025		0.025		0.025		0.165	60	0.300
TOTAL PROCUREMENT COST		0.250		0.360		0.800		0.700		0.500		0.500		0.500		0.500		2.800		6.910
TOTAL COST		0.250		0.360		0.800		0.725		0.535		0.525		0.525		0.525		2.965		7.210

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: N/A — PRODUCTION LEADTIME: N/A

CONTRACT DATE: N/A — PRIOR YEAR: N/A — CURRENT YEAR: N/A — BUDGET YEAR: N/A — BUDGET YEAR 2: N/A

PRODUCTION DELIVER DATE: N/A — PRIOR YEAR: N/A — CURRENT YEAR: N/A — BUDGET YEAR: N/A — BUDGET YEAR 2: N/A

INSTALLATION SCHEDULE:

	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	TC	
INPUT =======>	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
				VARIOUS ORDALTS						
OUTPUT =====>	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
				VARIOUS ORDALTS						

P3A INDIVIDUAL MODIFICATION

MODIFICATION TITLE: (81GE) -LHA MID-LIFE UPGRADE (GE950 INTERIOR VOICE NETWORK)

MODELS OF SYSTEM AFFECTED: LHA 1-5 AN/STC-1 REPLACEMENT

DESCRIPTION/JUSTIFICATION: LHA INTERIOR VOICE NETWORK

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY96 QTY	FY96 &PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
QUANTITY			1		1		1		2										5	0.000
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT			1	2.791	1	2.783	1	2.825	2	5.666									5	14.065
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT																			0	0.000
SUPPORT EQUIPMENT																			0	0.000
OTHER																			0	0.000
INTERIM CONTRACTOR SUPPORT																			0	0.000
INSTALLATION OF HARDWARE																				
FY95 EQUIPMENT & PRIOR																			0	0.000
FY96 EQUIPMENT																			0	0.000
FY97 EQUIPMENT					1	0.955													1	0.955
FY98 EQUIPMENT							1	0.997											1	0.997
FY99 EQUIPMENT									0	0.828	3	1.915							3	2.743
FY00 EQUIPMENT																			0	0.000
FY01 EQUIPMENT																			0	0.000
FY02 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000
																			0	0.000
TOTAL INSTALLATION COST		0.000		0.000		0.955		0.997		0.828		1.915		0.000		0.000		0.000	5	4.695
TOTAL PROCUREMENT COST		0.000		2.791		2.783		2.825		5.666		0.000		0.000		0.000		0.000		14.065
TOTAL COST		0.000		2.791		3.738		3.822		6.494		1.915		0.000		0.000		0.000		18.760

METHOD OF IMPLEMENTATION: Tiger Team ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: TBD

CONTRACT DATE: TBD in FY 97 PRIOR YEAR: CURRENT YEAR: N/A BUDGET YEAR: N/A BUDGET YEAR 2: TBD FY 97

PRODUCTION DELIVER DATE: TBD PRIOR YEAR: CURRENT YE N/A BUDGET YEAR: N/A BUDGET YEAR 2: TBD

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	TC 1,2,3,4	TOTAL
FY 96 & PRIOR									
FY 97			0,0,0,1						1
FY 98				0,0,0,1					1
FY 99						0,1,0,0			1
FY 00						0,1,1,0			2
FY 01									0
FY 02									0
To Complete									
TOTAL									5

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	TC 1,2,3,4	TOTAL
FY 96 & PRIOR									
FY 97				0,0,0,1					1
FY 98					0,0,0,1				1
FY 99							0,1,0,0		1
FY 00							1,1,0,0		2
FY 01									0
FY 02									0
To Complete									
Total									5

P-3A

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE **P-23**	A. APPROPRIATION/BUDGET ACTIVITY	B. P-1 ITEM NOMENCLATURE	C. DATE
	OPN BA-1: SHIP SUPPORT EQUIPMENT	GE950 - LHA INTERIOR VOICE NETWORK	FEBRUARY 1997

		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)												1				1						2	1		
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER	(P)																									
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2	4	5	5	5
ASSETS ON HAND	(BP)																									
DELIVERY FY & PRIOR	(P)																									
FY 96 & PRIOR	(P)																									
FY 97	(P)											1														
FY 98	(P)															1										
FY 99	(P)																			1						
FY 00	(P)																						1	1		
FY 01	(P)																									
FY 02	(P)																									
FY 03	(P)																									
FY	(P)																									
TOTAL ASSETS	(C)	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	4	5	5	5
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	1	1	0	0	0	0

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND	FY 96 & PRIOR UNDLVR	UNFUNDED
	1. APPN - OPN	5	0	0	0	0
	2. APPN -					
	3. PROCUREMENT LEADTIME	ADMIN Approx. 9 Mos.	INITIAL ORDER Approx. 8 Mos.	REORDER		

P-1 SHOPPING LIST

DD for 2447, JUN 86 ITEM NO.- 13 PAGE NO. - 8

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A

DATE
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
OPN BA-1: SHIP SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/PROJECT UNIT
GE950 - LHA INTERIOR VOICE NETWORK

1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1998							
						LHA 5 (FY 97)	1
FY 2000							

1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1999							
						LHA 4 (FY 98)	1
FY 2001							
		LHA 1 (FY 00)	1	LHA 3 (FY 99)	1		
		LHA 2 (FY 00)	1				

OPN BUDGET ITEM JUSTIFICATION SHEET						DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT						P-1 ITEM NOMENCLATURE POLLUTION CONTROL EQUIPMENT (81HF/0935)			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
QUANTITY									
COST (IN MILLIONS)	$103.2	$126.4	$156.8	$218.6	$129.7	$38.5	$35.4	$37.4	

SHIPBOARD POLLUTION CONTROL SYSTEMS/EQUIPMENT: This line item provides funds for the procurement of pollution control systems and equipment that are required by Navy ships in order for them to comply with international regulations, federal laws, DOD Directives and Navy environmental protection regulations. These regulations, laws and directives restrict the discharge of oily wastes, sewage, solid waste, plastic waste, medical waste and hazardous waste. Most of these applicable regulations require Navy ships to comply by fixed deadline dates. Failure to comply carries potential personal, civil, and criminal liability, and significantly imposes constraints on the operational capabilities of Navy ships. In some instances, the compliance schedule has required an acceleration of the normal schedules in the procurement/FMP process.

HF005 - C-100 OIL WATER SEPARATOR (OWS) - The C-100 OWS is a system designed to remove oil from oily bilge water so that the water can be discharged overboard in compliance with environmental regulations. The C-100 is a 100 gpm parallel plate OWS similar in technology to the 10 gpm model OPB 10NP. The C-100 OWS is designed for aircraft carriers and large amphibious ships. The IO for this is 32 with all units being procured in budget year and subsequent years. The total cost is $40.8M.

HF016 - OIL CONTENT MONITORS (OCM) - These monitors will be installed aboard surface ships, including submarine tenders downstream of the oil water separator, to provide positive control of the overboard discharge from the OCM to ensure discharges do not exceed state, federal, and international environmental regulations. Installation of these OCMs will enable the fleet to comply with DOD Directive 6050.15 and OPNAVINST 5090.1. The IO for this is 152 with 129 being procured in prior year with the balance procured in subsequent years. 76 units have been installed. Total Cost is $5.2M.

HF019 - SEWAGE PUMPS (40 GPM) - ShipAlts DD-963K-688K/669K and DDG-993-229K provide for capability to collect gray water (plumbing waste from showers, laundry, space deck drains, sinks, scullery, etc.) and discharge it to pier side sewage facilities. Numerous state and federal authorities, and some foreign ports have levied restrictions on the overboard discharge of gray water on US Navy ships. Sewage pumping systems are required for these alterations. Each unit of issue cited herein consists of two (2) pumps, level controls, valves and fittings. The DD-963/DG-993 classes use 40 gpm pumps. The IO for this is 32, 32 units were procured in prior year. 26 units have been installed. The total cost is $4.0M.

HF019 - SEWAGE PUMPS (200 GPM) - ShipAlt LHA-1-692K provides for capability to collect gray water (plumbing waste from showers, laundry, space deck drains, sinks, scullery, etc.) and discharge it to pier side sewage facilities. Numerous state and federal, authorities, and some foreign ports have levied restrictions on the overboard discharge of gray water on US Navy ships. Sewage pumping systems are required for these alterations. Each unit of issue cited herein consists of two (2) pumps, level controls, valves and fittings. The LHA-1 classes use 200 gpm pumps. The IO for this is 10, 2 units were procured in prior years. The total cost is $15.0M.

OPN BUDGET ITEM JUSTIFICATION SHEET	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE POLLUTION CONTROL EQUIPMENT (81HF/0935)

HF024 - CFC/HALON ELIMINATION PROGRAM - CFCs and Halons are two substances that have been implicated in the depletion of stratospheric ozone. The production of CFC-based refrigerants (CFC-11, CFC-12, CFC-114) is prohibited after 31 DEC 95 by the Clean Air Act of 1990. Presidential Executive Order of 21 APR 93 calls for federal agencies to "maximize the use of safe alternatives to ozone-depleting substances" . OPNAVINST 5090.1B dated 1 NOV 94 further requires the "reduction of the use and emission of [ozone-depleting substances] to the lowest achievable level". The Navy is currently dependent on CFC-based refrigerants for the mission-critical cooling of (1) vital electronics and weapon systems, (2) food and medical stowage, and (3) inhabited spaces aboard surface ships and submarines. To counter the immediate threat of production cessation on uninterrupted Fleet operations, CNO(N45) directed the Defense Logistics Agency to establish a stockpile of CFC-based refrigerants. This stockpile is sized to support Fleet operations until the last CFC-based systems are retired or converted to ozone-friendly refrigerants. In addition, the size of the stockpile was based on an assumed conversion schedule of shipboard air-conditioning and refrigeration systems. The CFC/Halon Elimination Team is now converting shipboard air-conditioning and refrigeration systems to ozone-friendly refrigerants. The CFC-12 conversion program, which will convert nearly 1,100 systems, began in FY 94 and is expected to complete in FY 00. To date, over 330 systems have been converted and 70 ships are "CFC-12-free". The CFC-114 program, which will convert approximately 574 systems, is expected to commence in FY 99 and complete in FY 08. The Team is also attempting to reduce overall shipboard consumption of refrigerants. Due to the dependence of shipboard weapon and support systems on refrigeration, an interruption in the conversion programs subjects the Navy to the risk of prematurely depleting the stockpile and, subsequently, significantly impairing Fleet operations. Total cost is approximately 468.6M equipment and install. 160 AC Backfit units have been installed and 170 CFC Reefer units now have been installed.

HF030 - PLASTIC WASTE PROCESSOR (PWP) - This equipment will be installed on surface ships to provide the capability, which does not currently exist, to process food contaminated and other plastic waste into compact and sanitary solid blocks for onboard storage, subsequent offload and recycle ashore. Navy policy, national and international regulations prohibit ships from discharging plastic waste at sea (based on MARPOL Annex V, PL 100-220, and OPNAVINST 5090.11). Congress has mandated that the Navy complete installations of PWPs on 25% of the ships by 1 March 1997, 50% by 1 July 1997, 75% by 1 July 1998 and complete installations by 31 December 1998. PWP equipment reduces the volume of plastic waste currently stored onboard ships approximately 30 times and eliminates a sanitation and odor condition. The PWP consists of a Plastic Waste Shredder and 1 to 2 Compress Melt Units (CMU). CMU's heat and compress the shredded plastic. Four types of PWP's are being procured based on the processing capacity required for various ships. Type-A consists of 1 Plastic Waste Shredder and 3 CMUs; Type-B, 1 Shredder, 2CMU's; Type-C, 2 CMU's and Type-D, a single CMU. Types of PWPs can be combined for larger ships which require greater processing capacity. PWP equipment has completed RDT&E. Milestone III, Approval for Production, was granted in January 1995. PWP equipment is being procured by competitive awards (2 contracts) following K Shipalt backfit installation of new ship construction where applicable. The procurement quantity is 245 units. 245 installations are included in the budget. Total revised cost is $247.0M. Due to the addition of FFGs that were scheduled for decommissioning, additional PWP units are required to support the revised FFG requirement. These units are acquired through reallocation of assets and maximizing the last procurement option.

HF004 - BILGE PUMPS - These pumps are used to transfer oily waste from the bilge to oily waste holding tanks where it can then be processed by the oil/water separator. The bilge pumps also allow bilge water to be pumped overboard through a deck riser while in port to permit offloading of bilge water to shore facilities. The IO for this is 27. Total cost is $1.1M.

HF830 - PRODUCTION ENGINEERING - The review and approval of any production contract technical documentation, or the separate development of this documentation to include Technical Manuals, PMS, Level III production drawings. Provisional Technical Documentation (PTD), Program Support Data (PSD), and Allowance Part's Lists (APL's); Engineering in support of final design reviews. This work can be accomplished by NAVSSES and the service Engineering Agent, other Naval Activities or contractors as appropriate.

OPN BUDGET ITEM JUSTIFICATION SHEET	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE POLLUTION CONTROL EQUIPMENT (81HF/0935)

HF51N - INSTALLATION OF EQUIPMENT - Funding is for the installation of equipment including Fleet Modernization Program installations, installation of training equipment, and installation equipment in other shore facilities. See attached sheets.

SHOREBASED POLLUTION EQUIPMENT - (N452)
The Shorebased funds provide for equipment required to clean up Navy oil spills on the open sea as required by the Federal Waste Pollution Control Act - Public Law 92-500. The law created a National Oil and Hazardous Substance Pollution Contingency Plan, and designates the Department of Defense as one of the primary agencies responsible for promotion of effective operation of the plan. OPNAVINST 5090.1A and NAVSEAINST 4740.8A assign the Supervisor of Salvage the responsibility to provide technical expertise, resources, and equipment for cleaning Navy -originated spills of oil and other hazardous material in coastal waters or the open sea. Major items of procurement are:

HF040 - SUPPORT SYSTEMS - These systems include those auxiliary systems required to keep the oil spill responders operating in the field. These systems include equipment required for command and control, repair, deployment, demobilization, and other ancillary requirements of a spill response. Required I/O is 68.

HF042 - BOOM TENDING BOATS (INFLATABLE) - Outboard powered inflatable boats 19' and 23' in length capable of operating in a wide variety of weather and sea conditions. These inflatable boats are better suited to open ocean operations than the rigid boats due to increased portability and operator safety. The boats are used for inspection and in-place maintenance of the moored boom systems and to provide for personnel and cargo transport throughout a spill response operations area. Required I/O is 22.

HF051 - OIL BOOM SYSTEMS - These systems consist of 2,000' of inflatable boom, with all associated equipment required to store, inflate, deploy, and repair the boom. The systems are packaged in an 8' x 8' x 20' shipping container. Required I/O is 46.

HF054 - BEACH TRANSFER SYSTEMS - These systems consist of all-terrain tractor with trailer and two all-terrain vehicles with support equipment packaged in an 8' x 8' x 20' shipping container. The system transports equipment and materials to otherwise inaccessible soft beach and mud areas of a spill response. Required I/O is 8.

HF055 - SALVAGE SKIMMER SYSTEMS - These systems are a collection of small, special-purpose skimmers, containment boom, transfer pumps, storage tanks, sorbents, and ancillary equipment intended as a stand-alone response package for small, salvage-related spills inside and adjacent to ships. Required I/O is 11.

HF056 - EQUIPMENT CLEAN-UP SYSTEMS - These systems provide for the extensive cleaning of equipment prior to demobilization at a response site. The system provides a full array of all tools and materials required for efficient cleaning and demobilization of response assets. Required I/O is 8.

HF057 - LOGISTICS SUPPORT SYSTEMS - Logistics support systems are used to assist in disposal of removed oil and debris. These systems include: vacuum systems, floating hose systems, oil bladder systems, and material transfer systems. Required I/O is 50.

OPN BUDGET ITEM JUSTIFICATION SHEET	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE POLLUTION CONTROL EQUIPMENT (81HF/0935)

HF059 - BOOM MOORING SYSTEMS (Deep Water Extension) - This system is used to extend the depth in which the existing boom mooring systems can be used from 200' to 600' allowing use of diversionary boom in deep water applications. Required I/O is 64.

HF060 - HOT TAP SYSTEMS: Designed to allow penetration into tanks below the waterline. The hot tap is a system that secures a device to the hull, cuts through shell plating and allows installation of a valve to permit pumping. This allows lightening or removal of oil from a vessel without tank access above the waterline. Required I/O is 7.

HF061 - VISCOUS OIL TRANSFER SYSTEMS: Oil that weathers, emulsifies, or mixes with other contaminants will become thick and viscous to the point that regular centrifugal pumping systems will not move the oil. The viscous oil pumping system is a different type of pump with peripherals to allow the pumping of this type of oil. Required I/O is 28.

HF062 - SUBMERSIBLE 6" HYDRAULIC PUMPING SYSTEMS: This system allows the lightening of oil from tanks aboard ships whose transfer systems are inoperative. The size of the pump allows for insertion the tanks from topside access hatches. Required I/o is 33.

HF063 - VESSEL OF OPPORTUNITY (VOSS) SKIMMING SYSTEMS: The VOSS is a skimming system which can be used aboard any vessel with enough deck space to support the operating equipment. It allows skimming capability in locations where traditional skimmers may not be practicable, such as offshore or in extremely inclement weather. It may be a belt, disk, wire or rope mop type skimmer. Required I/O is 14.

HF064 - MODULAR BARGE SYSTEMS: This system creates a temporary storage capability for recovered oil. Oil can be transferred from skimmers as well as oil bladders further transfer to shoreside facilities or large tank barge. Oil can also be transferred between oil bladders. The systems also allows for deck spaces upon which to set up other support systems or barge sections to incorporate future support systems. Required I/O is 4.

HF065 - BOARDING KITS: This is designed to be placed aboard a vessel with no power or support services for personnel. It contains all the equipment necessary to support a team of salvors and pollution response personnel while working aboard a "dead:" tanker. Required I/O is 10.

HF025 - METAL GLASS SHREDDER (MGS), LARGE PULPERS (LP) AND SMALL PULPERS (SP) - These equipment will be installed on surface ships to provide a capability which does not currently exist, to reliably process shipboard non-plastic solid waste. The pulpers are designed to pulp paper, cardboard and food waste into environmentally benigh slurry to be discharged. The MGS is designed to shred metal and glass waste into sinkable form and discharged. The Navy has developed the pulpers and MGS to eliminate the possibility of having Navy ships' waste fouling the marine environment and exposed beaches. The FY97 National Defense Authorization Act allows for the use of pulpers and shredders to achieve compliance with MARPOL special area discharge regulations and requires full surface ship compliance by 31 December 2000. The Secretary of Navy submitted to Congress the Navy's Special-Area Compliance Plan in November, 1996. In this plan, the Navy committed to budget, procure and install solid waste pulpers and shredders on all warships the size of frigates and larger by 31 December, 2000. The RFP for this procurement will be released in February 1997 with contract award in October 1997. Milestone III Acquisition Decision Memorandum was signed in September 1996. The MGS will be procured by competative awards followed by K ShipAlt backfit installation starting in August 1998. The pulpers and shredders will be forward-fitted on new ship construction where applicable. The Inventory Objective is for MGS is 175 units, for LP is 149 and SP is 35. The shredder is virtually identical to the shredder used for plastics processors, except it contains an additional part however, no production units have been procured in prior years. Total program cost is $290.9M.

HFDSA - THis budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 98.

OPN PROGRAM COST BREAKDOWN

A. DATE: FEBRUARY 1997

B. APROPRIATION/BUDGET ACTIVITY
WEAPONS SYSTEMS COST ANALYSIS
P-5 OPN BA 1: SHIPS SUPPORT EQUIPMENT

C. P-1 ITEM NOMENCLATURE
POLLUTION CONTROL EQUIPMENT 81HF
(81HF/0935)

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	SOLID WASTE									
HF030	PLASTIC WASTE PROCESSOR	A								
	PWP-TYPE A		40	$12,621	20	$6,759				
	PWP-TYPE B		43	$9,079	49	$10,759				
	PWP-TYPE C		30	$4,596	26	$4,265				
	PWP-TYPE D		4	$434						
HF830	PRODUCTION ENGINEERING	A		$3,552		$2,500		$3,637		$791
HF025	PULPERS & SHREDDERS	A								
	METAL GLASS SHREDDERS						126	$9,150	49	$3,668
	LARGE PULPERS						112	$19,671	37	$5,647
	SMALL PULPERS						22	$2,413	13	$1,233
	SUBTOTAL SOLID-WASTE		117	$30,282	95	$24,283	260	$34,871	99	$11,339
	NON-SOLID WASTE									
HF019	200 GPM SEWAGE PUMP	A	2	$150	4	$376	2	$200		
HF005	C100 OIL WATER SEPARATOR	A	21	$621			5	$168		
HF016	OIL CONTENT MONITOR	A	24	$285	0	$0				
HF024	CFC-12 (R-12) AC BACKFIT	A	65	$1,708	0	$0	84	$3,100	19	$700
HF024	CFC-12 (R-12) REEFER BACKFIT	A	106	$3,362	0	$0	250	$8,700	168	$6,500
HF024	CFC-114 (R-114) AC BACKFIT						8	$3,161	49	$12,754
HF125										
HF830	PRODUCTION ENGINEERING			$299		$66		$698		$1,913
HF004	BILGE PUMPS						12	$252		
	SUBTOTAL NON-SOLID WASTE			$6,425		$442		$16,279		$21,867
	SUBTOTAL SEA 03L			$36,707		$24,725		$51,150		$33,206

P-1 SHOPPING LIST
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WEAPONS SYSTEMS COST ANALYSIS

Exhibit P-5

OPN PROGRAM COST BREAKDOWN

A. DATE: FEBRUARY 1997

B. APROPRIATION/BUDGET ACTIVITY
WEAPONS SYSTEMS COST ANALYSIS
P-5 OPN BA 1: SHIPS SUPPORT EQUIPMENT

C. P-1 ITEM NOMENCLATURE
POLLUTION CONTROL EQUIPMENT 81HF
(81HF/0935)

ELEMENT OF COST		IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
COST CODE	(1)	(2)	QUANTITY (3)	TOTAL COST (4)	QUANTITY (5)	TOTAL COST (6)	QUANTITY (7)	TOTAL COST (8)	QUANTITY (9)	TOTAL COST (10)
	B. SHOREBASED - (N452)									
HF040	SUPPORT SYSTEMS	A	3	$214	3	$250	4	$344	2	$178
HF042	BOOM TEND BOATS (INFLATABLE)	A			1	$90			2	$190
HF051	OIL BOOM SYSTEMS	A	3	$675	4	$959	5	$1,206	3	$729
HF054	BEACH TRANSFER SYSTEMS	A					1	$64	2	$128
HF055	SALVAGE SKIMMER SYSTEMS	A			1	$88			1	$92
HF056	EQUIPMENT CLEAN-UP SYSTEMS	A			1	$95	1	$95		
HF057	LOGISTICS SUPPORT SYSTEMS	A	2	$323	3	$504	3	$510	3	$522
HF058	ARTIC OIL RECOVERY SYSTEMS	A			1	$350				
HF059	BOOM MOORING SYSTEMS	A			13	$127	16	$165	16	$168
HF060	HOT TAP SYSTEMS	A					1	$210		
HF061	VISCOUS OIL TRANSFER SYSTEM	A					2	$200		
HF062	SUBMERSIBLE 6" HYD PUMP SYS	A					3	$210	1	$72
HF063	V0SS SKIMMER SYSTEMS	A							1	$603
	SUBTOTAL SEA 00C			$1,212		$2,463		$3,004		$2,682

P-1 SHOPPING LIST
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WEAPONS SYSTEMS COST ANALYSIS

Exhibit P-5

OPN PROGRAM COST BREAKDOWN

A. DATE: FEBRUARY 1997

B. APROPRIATION/BUDGET ACTIVITY
WEAPONS SYSTEMS COST ANALYSIS
P-5 OPN BA 1: SHIPS SUPPORT EQUIPMENT

C. P-1 ITEM NOMENCLATURE
POLLUTION CONTROL EQUIPMENT 81HF
(81HF/0935)

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	SUBTOTAL SEA 00C			$1,212		$2,463		$3,004		$2,682
	SUBTOTAL SEA 03L			$36,707		$24,725		$51,150		$33,206
	GRAND TOTAL EQUIPMENT			$37,919		$27,188		$54,154		$35,888
HFDSA	DESIGN SERVICES ALLOCATION							$11,006		$29,682
HF5IN	INSTALLATION			$65,247		$100,304		$91,615		$153,051
	GRAND TOTAL INSTALLATION			$65,247		$100,304		$102,621		$182,733
	GRAND TOTAL EQUIPMENT & INSTALL			$103,166		$127,492		$156,775		$218,621

OPN BUDGET PROCUREMENT HISTORY AND PLANNING P-5A

A. DATE: FEBRUARY 1997

B. APPROPRIATION/BUDGET ACTIVITY: OPN BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: POLLUTION CONTROL EQUIPMENT (81HF/0935)

LINE ITEM FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
HF024								0		
CFC 12 AC/BF										
FY 1996	ITS INC NOR VA	RCP	NSWC PHILA,PA	FEB 96	NOV 97	65	$26,276 (1)	YES	NO	
FY 1998	UNKNOWN	RCP	NSWC PHILA,PA	FEB 98	NOV 99	84	$36,904	YES	NO	
FY 1999	UNKNOWN	RCP	NSWC PHILA,PA	FEB 99	NOV 00	19	$36,842	YES	NO	
HF024										
CFC 12 REEFER										
FY 1996	ITS INC NOR VA	RCP	NSWC PHILA,PA	FEB 96	FEB 97	106	31,716(1)	YES	NO	
FY 1998	UNKNOWN	RCP	NSWC PHILA,PA	FEB 98	FEB 99	250	34,800(1)	YES	NO	
FY 1999	UNKNOWN	RCP	NSWC PHILA,PA	FEB 99	FEB 00	168	38,690(1)	YES	NO	
HF024										
CFC R114 AC BACKFIT										
FY 1998	UNKNOWN	FFP	NAVSEA	APR 98	JAN 99	8	$395,125	YES	NO	
FY 1999	UNKNOWN	FFP	NAVSEA	DEC 98	DEC 99	49	$260,286	YES	NO	
HF005										
C100 OWS										
FY 1996	PARMATIC DANVILLE, N.J.	OPTION	NAVSEA	Apr-96	JUL 97	21	$29,571	YES	NO	
FY 1998	PARMATIC DANVILLE, N.J.	OPTION	NAVSEA	Apr-98	Jul-99	5	$33,600			
HF016										
OCM										
FY 1996	*UNKNOWN	C/FP	NAVSEA	OCT-96	OCT 98	24	$11,875	YES	NO	
HF019										
SEWAGE PUMP										
(200 GPM)										
FY 1996	SCOT PUMP	RCP	SPCC, MECH PA	APR 96	OCT 97	2	$75,000	YES	NO	
FY 1997	SCOT PUMP	RCP	SPCC, MECH PA	FEB 97	AUG 98	4	$94,000	YES	NO	
FY 1998	SCOT PUMP	RCP	SPCC, MECH PA	FEB 98	AUG 99	2	$100,000	YES	NO	
HF004										
BILGE PUMP										
FY 1998	MEGATOR PITTSBRG, PA	RCP	SPCC, MECH PA	Dec-98	Dec-99	12	$21,000	YES		

D. REMARKS

(1) UNIT PRICE OF CONVERSION KITS VARIES WITH SHIP CLASS

P-1 SHOPPING LIST

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EXHIBIT P-5A

OPN BUDGET PROCUREMENT HISTORY AND PLANNING P-5A

A. DATE: FEBRUARY 1997

B. APPROPRIATION/BUDGET ACTIVITY: OPN BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: POLLUTION CONTROL EQUIPMENT (81HF/0935)

LINE ITEM FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
HF030										
PLASTIC WASTE										
PROCESSOR										
PWP TYPE A										
FY 1996	UNIV TECH, TN	FP TYPE	NAVSEA	NOV 95	JUL 96	21	$331,291	YES	NO	9/94
FY 1997	UNIV TECH, TN	FP TYPE	NAVSEA	NOV 96	JUL 97	10	$361,122	YES	NO	9/94
PWP TYPE B										
FY 1996	UNIV TECH, TN	FP TYPE	NAVSEA	NOV 95	JUL 96	28	$217,621	YES	NO	9/94
FY 1997	UNIV TECH, TN	FP TYPE	NAVSEA	NOV 96	JUL 97	23	$233,599	YES	NO	9/94
PWP TYPE C										
FY 1996	UNIV TECH, TN	FP TYPE	NAVSEA	NOV 95	JUL 96	18	$151,384	YES	NO	9/94
FY 1997	UNIV TECH, TN	FP TYPE	NAVSEA	NOV 96	JUL 97	16	$167,383	YES	NO	9/94
PWP TYPE D										
FY 1996	UNIV TECH, TN	FP TYPE	NAVSEA	NOV 95	JUL 96	2	$109,500	YES	NO	9/94
PWP TYPE A										
FY 1996	WESTHSE ELEC, CA	FP TYPE	NAVSEA	NOV 95	JUL 96	19	$298,091	YES	NO	9/94
FY 1997	WESTHSE ELEC, CA	FP TYPE	NAVSEA	NOV 96	JUL 97	10	$314,756	YES	NO	9/94
PWP TYPE B										
FY 1996	WESTHSE ELEC, CA	FP TYPE	NAVSEA	NOV 95	JUL 96	15	$199,039	YES	NO	9/94
FY 1997	WESTHSE ELEC, CA	FP TYPE	NAVSEA	NOV 96	JUL 97	26	$207,159	YES	NO	9/94
PWP TYPE C										
FY 1996	WESTHSE ELEC, CA	FP TYPE	NAVSEA	NOV 95	JUL 96	12	$155,924	YES	NO	9/94
FY 1997	WESTHSE ELEC, CA	FP TYPE	NAVSEA	NOV 96	JUL 97	10	$158,719	YES	NO	9/94
PWP TYPE D										
FY 1996	WESTHSE ELEC, CA	FP TYPE	NAVSEA	NOV 95	JUL 96	2	$107,500	YES	NO	9/94

P-1 SHOPPING LIST

ITEM NO. 14 PAGE NO. 9

EXHIBIT P-5A

OPN BUDGET PROCUREMENT HISTORY AND PLANNING P-5A

A. DATE: FEBRUARY 1997

B. APPROPRIATION/BUDGET ACTIVITY: OPN BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: POLLUTION CONTROL EQUIPMENT (81HF/0935)

LINE ITEM FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
HFO25										
LARGE SOLID WASTE PULPER										
FY 1998	UNKNOWN	C/FP	NAVSEA	OCT 97	JUL 98	112	$175,637	YES	NO	
FY 1999	UNKNOWN	C/FP	NAVSEA	Jul-99	Jan-00	37	$152,628	YES	NO	
METAL GLASS SHREDDER										
FY 1998	UNKNOWN	C/FP	NAVSEA	OCT 97	JUL 98	126	$72,623	YES	NO	
FY 1999	UNKNOWN	C/FP	NAVSEA	Jul-99	Jan-00	49	$74,847	YES	NO	
SMALL PULPER										
FY 1998	UNKNOWN	C/FP	NAVSEA	OCT 97	JUL 98	22	$109,666	YES	NO	
FY 1999	UNKNOWN	C/FP	NAVSEA	Jul-99	Jan-00	13	$94,833	YES	NO	

P-1 SHOPPING LIST

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EXHIBIT P-5A

BUDGET PROCUREMENT HISTORY AND PLANNING Exhibit (P-5A) | DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N BA 1: Ships Support Equipment	Pollution Control Equipment	81HF

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HF040 Support Systems											
	FY 1996	GPC, Norfolk, VA	C/CPAF	NAVSEA	04/96	10/96	3	$71,333	YES	NO	
	FY 1997	Unknown	C/CPAF	NAVSEA	10/97	08/97	3	$83,333	YES	NO	
	FY 1998	Unknown	C/CPAF	NAVSEA	10/97	07/98	4	$86,000	YES	NO	
	FY 1999	Unknown	C/CPAF	NAVSEA	10/98	09/99	2	$89,000	YES	NO	
HF042 Boom Tend Boats (Inflat)											
	FY 1997	Unknown	C/CPAF	NAVSEA	02/97	09/97	1	$90,000	YES	NO	
	FY 1999	Unknown	C/CPAF	NAVSEA	10/98	08/99	2	$95,000	YES	NO	
HF051 Oil Boom Systems											
	FY 1996	GPC, Norfolk, VA	C/CPAF	NAVSEA	04/96	12/96	3	$225,000	YES	NO	
	FY 1997	Unknown	C/CPAF	NAVSEA	01/97	08/97	4	$239,750	YES	NO	
	FY 1998	Unknown	C/CPAF	NAVSEA	10/97	09/98	5	$241,200	YES	NO	
	FY 1999	Unknown	C/CPAF	NAVSEA	11/98	09/99	3	$243,000	YES	NO	

REMARKS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING Exhibit (P-5A) | DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N BA 1: Ships Support Equipment	Pollution Control Equipment	81HF

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HF054 Beach Tranfer Systems											
	FY 1998	Unknown	C/CPAF	NAVSEA	01/98	07/98	1	$64,000	YES	NO	
	FY 1999	Unknown	C/CPAF	NAVSEA	10/98	07/99	2	$64,000	YES	NO	
HF055 Salvage Skimmer Systems											
	FY 1997	Unknown	C/CPAF	NAVSEA	01/97	08/97	1	$88,000	YES	NO	
	FY 1999	Unknown	C/CPAF	NAVSEA	10/98	09/99	1	$92,000	YES	NO	
HF056 Equipment Clean-up Systems											
	FY 1997	Unknown	C/CPAF	NAVSEA	01/97	08/97	1	$95,000	YES	NO	
	FY 1998	Unknown	C/CPAF	NAVSEA	10/97	09/98	1	$95,000	YES	NO	

REMARKS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING Exhibit (P-5A) | DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N BA 1: Ships Support Equipment	Pollution Control Equipment	81HF

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HF057 Logistics Support Systems											
	FY 1996	GPC, Norfolk, VA	C/CPAF	NAVSEA	04/96	11/96	2	$161,500	YES	NO	
	FY 1997	Unknown	C/CPAF	NAVSEA	01/97	06/97	3	$168,000	YES	NO	
	FY 1998	Unknown	C/CPAF	NAVSEA	10/97	09/98	3	$170,000	YES	NO	
	FY 1999	Unknown	C/CPAF	NAVSEA	10/98	08/99	3	$174,000	YES	NO	
HF058 Arctic Oil Recovery Systems											
	FY 1997	Unknown	C/CPAF	NAVSEA	01/97	07/97	1	$350,000	YES	NO	
HF059 Boom Mooring Systems											
	FY 1997	Unknown	C/CPAF	NAVSEA	02/97	08/97	13	$9,769	YES	NO	
	FY 1998	Unknown	C/CPAF	NAVSEA	10/97	05/98	16	$10,312	YES	NO	
	FY 1999	Unknown	C/CPAF	NAVSEA	10/98	03/99	16	$10,500	YES	NO	

REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING Exhibit (P-5A) | DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N BA 1: Ships Support Equipment	Pollution Control Equipment	81HF

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HF060 Hot Tap Systems											
	FY 1998	Unknown	C/CPAF	NAVSEA	10/97	09/98	1	$210,000	YES	NO	
HF061 Viscous Oil Tranfer Systems											
	FY 1998	Unknown	C/CPAF	NAVSEA	10/97	08/98	2	$100,000	YES	NO	
HF062 Submersible 6" Hyd Pump Sys											
	FY 1998	Unknown	C/CPAF	NAVSEA	10/97	08/98	3	$70,000	YES	NO	
	FY 1999	Unknown	C/CPAF	NAVSEA	10/98	08/99	1	$72,000	YES	NO	
HF063 VOSS skimmer Systems											
	FY 1999	Unknown	C/CPAF	NAVSEA	10/98	07/99	1	$603,000	YES	NO	

REMARKS

CLASSIFICATION:
UNCLASSIFIED

FY 1998/1999 BUDGET PRODUCTION SCHEDULE

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APPROPRIATION/BUDGET ACTIVITY
OPN BA:1 SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE POLLUTION CONTROL EQUIPMENT

SUBHEAD: 81HF

DATE:
FEBRUARY 1997

COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	SERV	PROC QTY	ACCEPT PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	FISCAL YEAR 1996												FISCAL YEAR 1997												FISCAL Y 1998												LATER
						CALENDER YEAR												CALENDAR YEAR												CALENDAR YEAR 1998												
						oct	nov	dec	jan	feb	mar	apr	may	june	july	aug	sept	oct	nov	dec	jan	feb	mar	apr	may	june	jul	aug	sep	oct	nov	dec	jan	feb	mar	apr	may	june	jul	aug	sept	
HF030																																									
A	UNIV TECH INC		31	0	31							2	2	0	1	2	2	2	2	2	2	2	2	2	0	2	1	1	1	1	0	0	0	0	0	0						
	WESTINGHOUSE		29	0	29							2	3	2	1	2	2	2	2	2	2	2	2	0	0	2	1	0	0	0	0	0	0	0	0	0						
																																									0
																																									0
B	UNIV TECH INC		51	0	51							1	0	0	3	3	3	3	3	3	2	2	2	3	1	0	2	2	3	3	2	2	2	2	4	0	0	0				0
	WESTINGHOUSE		45	0	45							1	2	3	3	3	3	2	1	2	1	0	0	0	0	0	2	2	3	3	2	2	2	1	2	2	1	2	1			0
C	UNIV TECH INC		34	0	34							2	4	0	0	3	2	2	2	2	3	2	1	0	0	0	1	2	1	1	2	2	2	0	0	0	0					0
	WESTINGHOUSE		22	0	22							2	5	3	0	3	2	0	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
D	UNIV TECH INC		2	0	2												1	1																									0
	WESTINGHOUSE		2	0	2												1	1																									0
	TOTAL		216	0	216	0	0	0	0	0	0	10	16	8	8	16	16	13	12	13	13	8	7	7	3	0	9	8	8	8	7	6	6	3	6	2	1	2	1	0	0	0
						OC	NO	DE	JA	FE	MA	AP	MY	JN	JL	AU	SE	OC	NO	DE	JA	FE	MA	AP	MY	JN	JL	AU	SE	OC	NO	DE	JA	FE	MA	AP	MY	JN	JL	AU	SE	

PRODUCTION SCHEDULE

MANAFACTURER'S NAME AND LOCATION	MIN RATE	1-8-5	MAXIMUM	REACHED D+

	ADMIN LEAD TIME PRIOR 1 OCT	ADMIN LEAD TIME AFTER 1 OCT	MANU-FACTURING TIME	TOTAL AFTER 1 OCT
INITIAL	9	9	0	9
REORDER (PREVIOUS SOURCE)	8	8	0	8

REMARKS

7110/4 (REVISED 11/77)

P-1 SHOPPING LIST
ITEM NO. 14 PAGE NO. 15

CLASSIFICATION:
UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION POLLUTION CONTROL EQUIPMENT

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: PLASTIC WASTE PROCESSOR

DESCRIPTION/JUSTIFICATION: PROCESS FOOD, CONTAMINATED WASTE AND OTHER PLASTIC WASTE INTO COMPACT/SANITARY BLOCKS FOR STORAGE

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																			245	
QUANTITY	150		95																	
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT		40.8		21.8															0	62.6
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALLATION OF HARDWARE																				
FY96 & PRIOR EQUIPMENT	51	51.3	99	69.9															150	121.2
FY97 EQUIPMENT			15	14.7	77	43.1	3	3.7											95	61.5
FY98 EQUIPMENT																				
FY99 EQUIPMENT																				
FY00 EQUIPMENT																				
FY01 EQUIPMENT																				
FY02 EQUIPMENT																				
FY03 EQUIPMENT																				
TO COMPLETE																				
TOTAL INSTALLATION COST	51	51.3	114	84.6	77	43.1	3	3.7	0	0		0		0		0			245	182.7
TOTAL PROCUREMENT COST		40.8		21.8		0		0		0.0		0.0		0.0		0				62.6
TOTAL COST		92.1		106.4		43.1		3.7		0.0		0.0		0.0		0.0				245.3

METHOD OF IMPLEMENTATION: AIT SHIPYD CONTRACT ADMINISTRATIVE LEADTIME: 9 MONTHS PRODUCTION LEADTIME: 9 MONTHS

CONTRACT DATE: PRIOR YEAR: Jul-95 CURRENT YEAR: NOV95 BUDGET YEAR: Nov-96 BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Apr-96 CURRENT YEAR: Jul-96 BUDGET YEAR: Jul-97 BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT ---------->	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY 03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	6	2 7 15 28	25 31 32 4								150
FY 97			0 0 0 15	26 30 19 2	3						95
FY 98											
											245

OUTPUT ---------->	FY95	FY96	FY97	FY98	FY99	FY00	FY001	FY02	FY 03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR		6 6 15 3	28 25 31 32	4							150
FY 97				15 26 30 19	2 3						95
FY 98											

I.O. IS 245 UNITS. 245 *

P3A INDIVIDUAL MODIFICATION
MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT
MODELS OF SYSTEM AFFECTED: H2S SENSORS
DESCRIPTION/JUSTIFICATION: H2S GAS DETECTION SYSTEMS MEET SAFETY REUIREMENTS
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY	118																		118	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.6																	0.0	1.6
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY 96 & PRIOR	118	3.7																	118	3.7
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY 99 EQUIPMENT																			0	0.0
FY00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FYO2 EQUIPMENT																			0	0.0
FYO3 EQUIPMENT																			0	0.0
TOTAL INSTALLATION COST	118	3.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0	118	3.7
TOTAL PROCUREMENT COST		1.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.6
TOTAL COST		5.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		5.3

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: 9 MOS PRODUCTION LEADTIME: 9

CONTRACT DATE:	PRIOR YEAR: Dec-93	CURRENT YEAR:	BUDGET YEAR:	BUDGET YEAR 2:	
PRODUCTION DELIVER DATE:	PRIOR YEAR: Sep-94	CURRENT YEAR:	BUDGET YEAR:	BUDGET YEAR 2:	

INSTALLATION SCHEDULE:

INPUT ========>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
96 & PRIOR	44 39 33 2									118

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
96 & PRIOR	44 39 33 2									118

I.O. IS 397.

INSTALLATION EXHIBITS DO NOT ACCOUNT FOR THE 113 ASSETS

ALL UNITS PROCURED 94 & PRIOR. SURPLUS DUE TO DECOMMISSIONING OF SHIPS AFTER CONTRACT AWARD. SURPLUS USED AS SPARES.

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — DATE: Feb 97

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: 10NP OIL/WATER SEPARATOR

DESCRIPTION/JUSTIFICATION: REMOVES OIL FROM BILGE WATER SO WATER CAN BE DISCHARGED OVERBOARD WITHIN ENVIRONMENTAL REGULATIONS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E	13																		13	0.0
PROCUREMENT																				
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING		0.2																	0	0.2
EQUIPMENT	0		0		0		0												0	0.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	7	4.8	4	2.90	AP	0.10	1	2.4	1	1.5									13	11.7
FY97 EQUIPMENT																			0	0.00
FY98 EQUIPMENT																			0	0.00
FY99 EQUIPMENT																			0	0.00
FY00 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
FY02 EQUIPMENT																			0	0.00
FY03 EQUIPMENT																			0	0.00
TO COMPLETE																			0	0.00
TOTAL INSTALLATION COST		4.8		2.9		0.1		2.4		1.5		0.0		0.0		0.0		0.0	13.0	11.7
TOTAL PROCUREMENT COST		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.2
TOTAL COST		5.0		2.9		0.1		2.4		1.5		0.0		0.0		0.0		0.0		11.9

METHOD OF IMPLEMENTATION: AIT/SHIPYARD — ADMINISTRATIVE LEADTIME: — PRODUCTION LEADTIME:

CONTRACT DATE: PRIOR YEAR: — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	2 1 2 2	1 1 1 1		1	1					13
FY 97										
FY 98										
FY 99										
										13

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR		2 1 2 2	1 1 1 1		1	1				13
FY 97										
FY 98										
FY 99										
										13

I.O. IS 326.

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — DATE: Feb-97

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: C50 OIL/WATER SEPARATOR

DESCRIPTION/JUSTIFICATION: REMOVES OIL FROM BILGE WATER SO WATER CAN BE DISCHARGED OVERBOARD WITHIN ENVIRONMENTAL REGULATIONS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E	6																		6	0.0
PROCUREMENT																				
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.1	0		0		0												0	0.1
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR			4	1.6	0	0.00	2	1.4											6	3.0
FY97 EQUIPMENT																			0	0.00
FY98 EQUIPMENT																			0	0.00
FY99 EQUIPMENT																			0	0.00
FY00 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
FY02 EQUIPMENT																			0	0.00
FY03 EQUIPMENT																			0	0.00
TO COMPLETE																			0	0.00
TOTAL INSTALLATION COST		0.0		1.6		0.0		1.4		0.0		0.0		0.0		0.0		0.0	6.0	3.0
TOTAL PROCUREMENT COST		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.1
TOTAL COST		0.1		1.6		0.0		1.4		0.0		0.0		0.0		0.0		0.0		3.1

METHOD OF IMPLEMENTATION: AIT/SHIPYARD — ADMINISTRATIVE LEADTIME: — PRODUCTION LEADTIME:

CONTRACT DATE: PRIOR YEAR: — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR		4		2						6
FY 97										
FY 98										
FY 99										
										6

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR			4		2					6
FY 97										
FY 98										
FY 99										

I.O. IS 6 UNITS.

P-3A

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — DATE: Feb-97

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: C100 OIL/WATER SEPARATOR

DESCRIPTION/JUSTIFICATION: REMOVES OIL FROM OILY BILGE WATER TO MEET DISCHARGE REGULATIONS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																				
QUANTITY	27		0		5		0		0										32	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT	27	0.8	0	0.0	5	0.17	0	0.0	0	0.00									32	1.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	2	0.90	4	4.9	12	14.5	8	11.5	1	1.30									27	33.1
FY97 EQUIPMENT																			0	0.00
FY98 EQUIPMENT									5	7.2									5	7.2
FY99 EQUIPMENT																			0	0.00
FY00 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
FY02 EQUIPMENT																			0	0.00
FY03 EQUIPMENT																			0	0.00
TO COMPLETE																			0	0.00
TOTAL INSTALLATION COST		0.9		4.9		14.5		11.5		8.5		0.0		0.0		0.0		0.0	32.0	40.3
TOTAL PROCUREMENT COST		0.8		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0
TOTAL COST		1.7		4.9		14.7		11.5		8.5		0.0		0.0		0.0		0.0		40.3

METHOD OF IMPLEMENTATION: AIT/SHIPYARD — ADMINISTRATIVE LEADTIME: 6 — PRODUCTION LEADTIME: 12

CONTRACT DATE: Jan-96 — PRIOR YEAR: 4/96 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2: 4/98

PRODUCTION DELIVER DATE: — PRIOR YEAR: 7/97 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2: 4/99

INSTALLATION SCHEDULE:

	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY 03	TC	
INPUT =======>	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1,2,3,4	1,2,3,4	TOTAL
FY 96 & PRIOR		2	2 2	8 2 2	2 2 2 2	1					27
FY 97											0
FY 98						5					5
FY 99											0
											32

	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY 03	TC	
OUTPUT =====>	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1,2,3,4	1,2,3,4	TOTAL
FY 96 & PRIOR			2	2 2	8 2 2	2 2 2 2	1				27
FY 97											0
FY 98							5				5
FY 99											0
											32

I.O. IS 32.

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — DATE: Feb-97

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: OIL CONTENT MONITOR

DESCRIPTION/JUSTIFICATION: MONITORS OIL CONTENT OF OIL/WATER SEPARATOR EFFLUENT

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																				
QUANTITY	87																		87	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT	87	0.8																	87	0.8
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	14	0.82	33	2.0	26	1.8	9	0.43	9	0.2									91	5.2
FY97 EQUIPMENT																			0	0.00
FY98 EQUIPMENT																			0	0.00
FY99 EQUIPMENT																			0	0.00
FY00 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
FY02 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
TO COMPLETE																			0	0.00
TOTAL INSTALLATION COST		0.8		2.0		1.8		0.4		0.2		0.0		0.0		0.0		0.0	91.0	5.2
TOTAL PROCUREMENT COST		0.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
TOTAL COST		1.6		2.0		1.8		0.4		0.2		0.0		0.0		0.0		0.0		5.2

METHOD OF IMPLEMENTATION: AIT/SHIPYARD — ADMINISTRATIVE LEADTIME: — PRODUCTION LEADTIME: 16 MOS

CONTRACT DATE: PRIOR YEAR: 1/95 — CURRENT YEAR: 10/96 — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: 12/96 — CURRENT YEAR: 10/98 — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	5 3 2 4	7 8 11 7	13 4 9	3 4 2	5					87
FY 97										
FY 98										
FY 99										
										87

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR		5 3 2 4	7 8 11 7	13 4 9	3 4 2	5				87
FY 97										
FY 98										
FY 99										
										87

I.O. IS 87.

P3A INDIVIDUAL MODIFICATION POLLUTION CONTROL EQUIPMENT

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: CFC-12 AC BACKFIT

DESCRIPTION/JUSTIFICATION: MODIFIES CFC-12 AC UNITS ON MOST SURFACE SHIP CLASSES TO OZONE-FRIENDLY HFC 134A.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																			207	
QUANTITY	104		0		84		19													
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT		3.4		0		3.1		0.7											0	7.2
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALLATION OF HARDWARE																				
FY96 & PRIOR EQUIPMENT	5	0.2	1	0.1	98	5.1													104	5.4
FY97 EQUIPMENT		*			0	0.0													0	0
FY98 EQUIPMENT					13	0.6	30	1.9	19	1.3							22	0.6	84	4.4
FY99 EQUIPMENT									0	0							19	0.6	19	0.6
FY00 EQUIPMENT																				
FY00 EQUIPMENT																				
FY02 EQUIPMENT																				
FY03 EQUIPMENT																				
TO COMPLETE																				
TOTAL INSTALLATION COST	5	0.2	1	0.1	111	5.7	30	1.9	19	1.3	0	0		0			0	0.0	207	10.4
TOTAL PROCUREMENT COST		3.4		0.0		3.1		0.7		0		0.0		0.0						7.2
TOTAL COST		3.6		0.1		8.8		2.6		1.3		0.0		0.0						17.6

METHOD OF IMPLEMENTATION: AIT CONTRACT ADMINISTRATIVE LEADTIME: 9 MONTHS PRODUCTION LEADTIME: 12 MOS

CONTRACT DATE: PRIOR YEAR: Feb-96 CURRENT YEAR: Feb-97 BUDGET YEAR: Feb-98 BUDGET YEAR 2: Feb-99

PRODUCTION DELIVER DATE: PRIOR YEAR: Feb-97 CURRENT YEAR: Nov-97 BUDGET YEAR: Nov-99 BUDGET YEAR 2: Nov-00

INSTALLATION SCHEDULE:

INPUT ---------->	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	5 0 0 0	0 1 0 0	26 27 29 16							104
FY 97										0
FY 98			0 0 7 6	7 7 7 9	7 7 5				42	84
FY 99									19	19
										207

OUTPUT ---------->	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	5 0 0 0	0 1 0 0	26 27 29 16							104
FY 97										0
FY 98			0 0 7 6	7 7 7 9	7 7 5				42	84
FY 99									19	19
										207

I.0. IS 360

* 0.4M OF FY 96 FUNDS FOR ADVANCE PLANNING

P3A INDIVIDUAL MODIFICATION POLLUTION CONTROL EQUIPMENT

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: CFC-12 REEFER UNIT CONVERSION

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL TOTAL QTY	TOTAL TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
QUANTITY	159		0		250		168												577	0
INSTALLATION KITS	*																			
INSTALLATION KITS NONRECURRING																				
EQUIPMENT		4.9		0		8.7		6.5												20.1
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALLATION OF HARDWARE																				
FY96 & PRIOR EQUIPMENT	19	0.6	21	1.0	119	6.3													159	7.9
FY97 EQUIPMENT		**			0	0.0													0	0.0
FY98 EQUIPMENT					0	0.0	157	10.7	93	6.1									250	16.8
FY99 EQUIPMENT									75	5.0							93	6.2	168	11.2
FY00 EQUIPMENT																				
FY01 EQUIPMENT																				
FY02 EQUIPMENT																				
FY 03 EQUIPMENT																				
TO COMPLETE																				
TOTAL INSTALLATION COST	19	0.6	21	1.0	119	6.3	157	10.7	168	11.1	0	0	0	0	0	0	93	6.2	577	35.9
TOTAL PROCUREMENT COST		4.9		0.0		8.7		6.5		0.0		0.0		0.0		0.0		0.0		20.1
TOTAL COST		5.5		1.0		15.0		17.2		11.1		0.0		0.0		0.0		6.2		56

METHOD OF IMPLEMENTATION: AIT CONTRACT ADMINISTRATIVE LEADTIME: 9 PRODUCTION LEADTIME: 12 MOS

CONTRACT DATE: PRIOR YEAR: Feb-96 CURRENT YEAR: BUDGET YEAR: Feb-98 BUDGET YEAR 2: Feb-99

PRODUCTION DELIVER DATE: PRIOR YEAR: Feb-97 CURRENT YEAR: BUDGET YEAR: Feb-99 BUDGET YEAR 2: Feb-00

INSTALLATION SCHEDULE:

INPUT ---------->	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR	0 0 8 10	10 57 33 34	7							159
FY 97			0							0
FY 98				0 32 29 32	39 39 79 0					250
FY 99					0 84 84 0					168
FY 00										
FY 01										
FY 02										
FY 03										577
TC										

OUTPUT ---------->	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR	0 0 5 3	10 16 0 6	29 29 29 32							159
FY 97										0
FY 98				0 0 32 29	32 39 39 79					250
FY 99					0 0 33 42					75
FY 00										
FY 01										
FY 02										
FY 03										484
TC										

I.O. IS 713.

* INCLUDES 53 UNITS PROCURED IN 95 & PRIOR

** $.5M OF FY 96 FUNDS FOR ADVANCE PLANNING.

P3A INDIVIDUAL MODIFICATION POLLUTION CONTROL EQUIPMENT

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: CFC-114 AC UNIT CONVERSION

DESCRIPTION/JUSTIFICATION: MODIFIES CFC-114 AC UNITS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COMP COST	TOTAL TOTAL QTY	TOTAL TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
QUANTITY					8		49		39		43		54		42		339		574	0
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT						3.2		12.8		8.7		11.7		13.2		12.3		101.7		163.6
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALLATION OF HARDWARE																				
FY96 & PRIOR EQUIPMENT																				
FY97 EQUIPMENT																				
FY98 EQUIPMENT					AP	1.2	8	4.9											8	6.1
FY99 EQUIPMENT									49	15.6									49	15.6
FY00 EQUIPMENT											39	13.0							39	13.0
FY01 EQUIPMENT													43	17.6					43	17.6
FY02 EQUIPMENT															54	19.9			54	19.9
FY 03 EQUIPMENT																				
TO COMPLETE																	381	141.3	381	141.3
TOTAL INSTALLATION COST	0	0	0	0	0	1.2	8	4.9	49	15.6	39	13.0	43	17.6	54	19.9	381	141.3	574	213.5
TOTAL PROCUREMENT COST						3.2		12.8		8.7		11.7		13.2		12.3		101.7		163.6
TOTAL COST		0.0		0.0		4.4		17.7		24.3		24.7		30.8		32.2		243.0		377.1

METHOD OF IMPLEMENTATION: AIT CONTRACT ADMINISTRATIVE LEADTIME: 9 PRODUCTION LEADTIME: 9 MOS

CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Apr-98 BUDGET YEAR 2: Dec-98

PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Jan-99 BUDGET YEAR 2: Dec-99

INSTALLATION SCHEDULE:

INPUT ---------->	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR										
FY 97										
FY 98				4 4						8
FY 99					4 11 14 20					49
FY 00						13 3 12 11				39
FY 01							12 9 9 13			43
FY 02								16 14 14 10		54
FY 03									381	381
TC										574

OUTPUT ---------->	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 96 & PRIOR										
FY 97										
FY 98				4 4						8
FY 99					4 11 14 20					49
FY 00						13 3 12 11				39
FY 01							12 9 9 13			43
FY 02								16 14 14 10		54
FY 03									381	381
TC										574

I.O. IS 574.

P3A INDIVIDUAL MODIFICATION POLLUTION CONTROL EQUIPMENT

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: SEWAGE PUMP/GREYWATER (40GPM)

DESCRIPTION/JUSTIFICATION: COLLECT GREYWATER (PLUMBING WASTE FROM SHOWERS ETC.) & DISCHARGE IT TO PIERSIDE SEWAGE FACILITIES

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
QUANTITY	6																		6	
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT		2.2																	0	2.2
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALLATION OF HARDWARE																				
FY96 & PRIOR EQUIPMENT	3	1.9	AP	0.2	3	1.9													6	4.0
FY97 EQUIPMENT																				
FY98 EQUIPMENT																				
FY99 EQUIPMENT																				
FY00 EQUIPMENT																				
FY00 EQUIPMENT																				
FY02 EQUIPMENT																				
FY03 EQUIPMENT																				
TO COMPLETE																				
TOTAL INSTALLATION COST	3	1.9	AP	0.2	3	1.5											0	0.0	6	4
TOTAL PROCUREMENT COST		2.2		0.0		0.0												0.0		2.2
TOTAL COST		4.1		0.2		1.5												0.0		6.2

METHOD OF IMPLEMENTATION: AIT CONTRACT ADMINISTRATIVE LEADTIME: 9 MOS PRODUCTION LEADTIME: 12 MOS

CONTRACT DATE: PRIOR YEAR: Dec-93 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Dec-94 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT ---------->	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	3		3							6

OUTPUT ---------->	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR		3		3						6

I.O. IS 6.

P3A INDIVIDUAL MODIFICATION POLLUTION CONTROL EQUIPMENT

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: SEWAGE PUMP/GREYWATER (200 GPM)

DESCRIPTION/JUSTIFICATION: COLLECT GREYWATER WASTE FROM SHOWERS, LAUNDRY AND DISCHARGE IT TO PIERSIDE SEWAGE FACILITIES

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
QUANTITY	4		4		2														10	
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT		0.2		0.4		0.2													0	0.8
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALLATION OF HARDWARE																				
FY96 & PRIOR EQUIPMENT	AP	0.5	2	1.8	2	3.4													4	4.9
FY97 EQUIPMENT							2	3.1	AP	0.2	2	2.7							4	6.0
FY98 EQUIPMENT											2	2.5							2	2.4
FY99 EQUIPMENT																				
FY00 EQUIPMENT																				
FY01 EQUIPMENT																				
FY02 EQUIPMENT																				
FY 03 EQUIPMENT																				
TO COMPLETE																			0	0
TOTAL INSTALLATION COST	AP	0.5	2	1.8	2	3.4	2	3.1	AP	0.2	4	5.2							10	13.3
TOTAL PROCUREMENT COST		0.2		0.4		0.2		0.0		0.0		0.0								0.8
TOTAL COST		0.7		2.2		3.6		3.1		0.2		5.2								14.1

METHOD OF IMPLEMENTATION: SHIPYD CONTRACT ADMINISTRATIVE LEADTIME: 9 MONTHS PRODUCTION LEADTIME: 18 MOS

CONTRACT DATE: PRIOR YEAR: Apr-96 CURRENT YEAR: Feb-97 BUDGET YEAR: Feb-98 BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: Oct-97 CURRENT YEAR: Aug-98 BUDGET YEAR: Aug-99 BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT ---------->	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
FY 96 & PRIOR		4								4
FY 97			2	2						4
FY 98						2				2
TC										0
										10

OUTPUT ---------->	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
FY 96 & PRIOR		4								4
FY 97			2	2						4
FY 98						2				2
TC										0
										10

I.O. IS 10.

P3A INDIVIDUAL MODIFICATION
MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT
MODELS OF SYSTEM AFFECTED: METAL GLASS SHREDDER
DESCRIPTION/JUSTIFICATION: PROCESS METAL AND GLASS FOR DISPOSAL OVERBOARD
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT					123	8.9	49	3.7											172	12.6
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT *					3	0.3													3	0.3
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY 96 & PRIOR																			0	0.0
																			0	0.0
FY97 EQUIPMENT																			0	0.0
																			0	0.0
FY98 EQUIPMENT			..	.	AP	2.9	AP	0.5	AP	0.0									0	3.4
					7	4.1	96	43.7	20	6.7									123	54.5
FY 99 EQUIPMENT					AP	0.1	AP	1.1	AP	0.1									0	1.3
						0.1	3	1.3	43	16.2	3	1.5							49	19.1
FY00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FYO2 EQUIPMENT																			0	0.0
FYO3 EQUIPMENT																			0	0.0
																			0	0.0
TO COMPLETION																			0	0.0
TOTAL INSTALLATION COST		0.0		0.0		7.2		46.6		23.0		1.5		0.0		0.0		0.0	172	78.3
TOTAL PROCUREMENT COST		0.0		0.0		9.2		3.7		0.0		0.0		0.0		0.0		0.0		12.9
TOTAL C OST		0.0		0.0		16.4		50.3		23.0		1.5		0.0		0.0		0.0		91.2

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: 12 PRODUCTION LEADTIME: 9
CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Oct-97 BUDGET YEAR 2: Jul-99
PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Jul-98 BUDGET YEAR 2: Jul-00

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 98			0 0 0 7	27 33 20 16	15 5 0 0					123
FY 99				0 0 0 3	5 20 15 3	3 0 0 0				49
FY 00										0
FY 01										0
										172

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 98				7 27 33 20	16 15 5 0					123
FY 99					3 5 20 15	3 3 0 0				49
FY 00										0
FY 01										0
										172

* 3 TRAINERS REQUIRE NO INSTALLATION
THE TOTAL PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM

P3A INDIVIDUAL MODIFICATION
MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT
MODELS OF SYSTEM AFFECTED: LARGE SOLID WASTE PULPER
DESCRIPTION/JUSTIFICATION: PROCESS FOOD, PAPER AND OTHER NON PLASTIC WASTE FOR DISPOSAL OVERBOARD
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT					109	19.2	37	5.6											146	24.8
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT *					3	0.5													3	0.5
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY 96 & PRIOR																			0	0.0
																			0	0.0
FY97 EQUIPMENT																			0	0.0
																			0	0.0
FY98 EQUIPMENT			.	.	AP	8.0	AP	1.7	AP	0.0									0	9.7
					7	7.5	84	78.5	18	16.7									109	103
FY 99 EQUIPMENT					AP	0.3	AP	2.6	AP	0.2									0	3.1
						0.3	2	2.3	32	27.6	3	3.0							37	33.2
FY00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FYO2 EQUIPMENT																			0	0.0
FYO3 EQUIPMENT																			O	0.0
																			0	0.0
TO COMPLETION																			0	0.0
TOTAL INSTALLATION COST		0.0		0.0		16.1		85.1		44.5		3.0		0.0		0.0		0.0	146	148.7
TOTAL PROCUREMENT COST		0.0		0.0		19.7		5.6		0.0		0.0		0.0		0.0		0.0		25.3
TOTAL C OST		0.0		0.0		35.8		90.7		44.5		3.0		0.0		0.0		0.0		174.0

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: 12 PRODUCTION LEADTIME: 9
CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Oct-97 BUDGET YEAR 2: Jul-99
PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Jul-98 BUDGET YEAR 2: Jan-00

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 98			0 0 0 7	26 28 15 15	12 6 0 0					109
FY 99				0 0 0 2	6 13 11 2	3 0 0 0				37
FY 00										0
FY 01										0
										146

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 98				7 26 28 15	15 12 6 0					109
FY 99					2 6 13 11	2 3 0 0				37
FY 00										0
FY 01										0
										146

* 3 TRAINERS REQUIRE NO INSTALLATION
THE TOTAL PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM

P3A INDIVIDUAL MODIFICATION
MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT
MODELS OF SYSTEM AFFECTED: SMALL SOLID WASTE PULPER
DESCRIPTION/JUSTIFICATION: PROCESS FOOD, PAPER AND OTHER NON PLASTIC WASTE FOR DISPOSAL OVERBOARD
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT					19	2.1	13	1.2											32	3.3
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT *					3	0.3													3	0.3
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY 96 & PRIOR																			0	0.0
																			0	0.0
FY97 EQUIPMENT																			0	0.0
																			0	0.0
FY98 EQUIPMENT					.AP	0.8	AP	0.2	AP	0.0									0	1.0
						0.2	16	9.4	3	2.4									19	12
FY 99 EQUIPMENT							AP	0.7	AP	0.0									0	0.7
							1	0.7	12	7.9									13	8.6
FY00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FYO2 EQUIPMENT																			0	0.0
FYO3 EQUIPMENT																			O	0.0
																			0	0.0
TO COMPLETION																			0	0.0
TOTAL INSTALLATION COST		0.0		0.0		1.0		11.0		10.3		0.0		0.0		0.0		0.0	32	22.3
TOTAL PROCUREMENT COST		0.0		0.0		2.4		1.2		0.0		0.0		0.0		0.0		0.0		3.6
TOTAL C OST		0.0		0.0		3.4		12.2		10.3		0.0		0.0		0.0		0.0		25.9

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: 12 PRODUCTION LEADTIME: 9
CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Oct-97 BUDGET YEAR 2: Jul-99
PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: Jul-98 BUDGET YEAR 2: Jan-00

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 98			0 0 0 0	2 6 6 2	3 0 0 0					19
FY 99				0 0 0 1	1 5 5 1	0 0 0 0				13
FY 00										0
FY 01										0
										32

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 98				0 2 6 6	2 3 0 0					19
FY 99					1 1 5 5	1 0 0 0				13
FY 00										0
FY 01										0
										32

* 3 TRAINERS REQUIRE NO INSTALLATION
THE TOTAL PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — DATE: Feb-97

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

MODELS OF SYSTEM AFFECTED: BILGE PUMPS

DESCRIPTION/JUSTIFICATION: TRANSFER OILY BILGE WATER FROM BILGE WELLS TO OILY WASTE HOLDING TANKS FOR PROCESSING BY THE OWS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																				
QUANTITY	15				12														27	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT	15	0.2			12	0.3													27	0.5
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	2	0.5	4	0.5	4	0.3	3	0.0											13	1.3
FY97 EQUIPMENT																			0	0.00
FY98 EQUIPMENT							3	0.00	9	0.00									12	0.00
FY99 EQUIPMENT																			0	0.00
FY00 EQUIPMENT																			0	0.00
FY01 EQUIPMENT																			0	0.00
FY02 EQUIPMENT																			0	0.00
FY03 EQUIPMENT																			0	0.00
TO COMPLETE																			0	0.00
TOTAL INSTALLATION COST		0.5		0.5		0.3		0.0		0.0		0.0		0.0		0.0		0.0	25.0	1.3
TOTAL PROCUREMENT COST		0.2		0.0		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.5
TOTAL COST		0.7		0.5		0.6		0.0		0.0		0.0		0.0		0.0		0.0		1.8

METHOD OF IMPLEMENTATION: AIT/SHIPYARD — ADMINISTRATIVE LEADTIME: — PRODUCTION LEADTIME: 12

CONTRACT DATE: PRIOR YEAR: — CURRENT YEAR: 12/98 — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: — CURRENT YEAR: 12 99 — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR	2	2 2	4 0 2	3						15
FY 97										0
FY 98				3	9					12
FY 99										0
										27

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 96 & PRIOR		2 2 2	4 2	3						15
FY 97										0
FY 98					3	9				12
FY 99										0
										27

I.O. IS 27.

P-3A

CLASSIFICATION: UNCLASSIFIED

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.	Date: February 1997
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)	Admin Leadtime (after Oct 1): xx months	Prod Leadtime

HF040 Support Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary	3	3	4	2	2	3	4	4
Unit Cost	71.3	83.3	86	89.5	90	92	94	96
Total Cost	214	250	344	179	180	276	376	384
Asset Dynamics								
Beginning Asset Position	37	40	42	46	48	51	54	58
Deliveries from all prior year funding	3							
Deliveries from FY 97 funding		2	1					
Deliveries from FY 98 funding			3	1				
Deliveries from FY 99 funding				1	1			
Deliveries from subsequent years' funding					2	3	4	4
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	40	42	46	48	51	54	58	62
Inventory Objective or Current Authorized Allowance	68	68	68	68	68	68	68	68

Inventory Objective 68	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.	Date: February 1997
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)	Admin Leadtime (after Oct 1): xx months	Prod Leadtime

HF042 Boom Tend Boats	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		1		2		2		3
Unit Cost		90		95		99		98.6
Total Cost		90		190		198		295.8
Asset Dynamics	8	8	9	9	11	11	13	13
Beginning Asset Position								
Deliveries from all prior year funding								
Deliveries from FY 97 funding		1						
Deliveries from FY 98 funding								
Deliveries from FY 99 funding				2				
Deliveries from subsequent years' funding						2		3
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	8	9	9	11	11	13	13	16
Inventory Objective or Current Authorized Allowance	22	22	22	22	22	22	22	22

Inventory Objective 22	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF051 Oil Boom Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary	3	4	5	3	4	3	3	3
Unit Cost	225	239.7	241.2	243	245	248	251	254
Total Cost	675	959	1206	729	980	744	753	762
Asset Dynamics								
Beginning Asset Position	15	18	20	23	24	28	30	32
Deliveries from all prior year funding	3							
Deliveries from FY 97 funding		2	2					
Deliveries from FY 98 funding			3	2				
Deliveries from FY 99 funding				1	2			
Deliveries from subsequent years' funding					4	3	3	3
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.			2	2	2	1	1	1
End of Year Asset Position	18	20	23	24	28	30	32	34
Inventory Objective or Current Authorized Allowance	46	46	46	46	46	46	46	46

Inventory Objective 46	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF054 Beach Transfer Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			1	2			2	
Unit Cost			64	64			67	
Total Cost			64	128			134	
Asset Dynamics								
Beginning Asset Position	1	2	2	3	5	5	5	7
Deliveries from all prior year funding	1							
Deliveries from FY 97 funding								
Deliveries from FY 98 funding			1					
Deliveries from FY 99 funding				2				
Deliveries from subsequent years' funding							2	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	2	2	3	5	5	5	7	0
Inventory Objective or Current Authorized Allowance	8	8	8	8	8	8	8	8

Inventory Objective 8	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF055 Salv Skimmer Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		1		1	2		1	1
Unit Cost		88		92	95		96	98
Total Cost		88		92	190		96	98
Asset Dynamics								
Beginning Asset Position	2	2	3	3	4	6	6	7
Deliveries from all prior year funding								
Deliveries from FY 97 funding		1						
Deliveries from FY 98 funding								
Deliveries from FY 99 funding				1				
Deliveries from subsequent years' funding					2		1	1
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	2	3	3	4	6	6	7	8
Inventory Objective or Current Authorized Allowance	11	11	11	11	11	11	11	11

Inventory Objective 11	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.				Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)	Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF056 Equip Clean-up Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		1	1			1		
Unit Cost		95	95			97		
Total Cost		95	95			97		
Asset Dynamics								
Beginning Asset Position	3	3	4	5	5	5	6	6
Deliveries from all prior year funding								
Deliveries from FY 97 funding		1						
Deliveries from FY 98 funding			1					
Deliveries from FY 99 funding								
Deliveries from subsequent years' funding						1		
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	3	4	5	5	5	6	6	6
Inventory Objective or Current Authorized Allowance	8	8	8	8	8	8	8	8

Inventory Objective 8	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF057 Logistics Support Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary	2	3	3	3	2	3	3	4
Unit Cost	161.5	168	170	174	178	182	185	188
Total Cost	323	504	510	522	356	546	555	752
Asset Dynamics								
Beginning Asset Position	4	6	8	11	14	17	20	23
Deliveries from all prior year funding	2							
Deliveries from FY 97 funding		2	1					
Deliveries from FY 98 funding			2	1				
Deliveries from FY 99 funding				2	1			
Deliveries from subsequent years' funding					2	3	3	4
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	6	8	11	14	17	20	23	27
Inventory Objective or Current Authorized Allowance	50	50	50	50	50	50	50	50

Inventory Objective 50	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF058 Arctic Oil Recovery Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		1			1			
Unit Cost		350			370			
Total Cost		350			370			
Asset Dynamics								
Beginning Asset Position			1	1	1	2	2	2
Deliveries from all prior year funding								
Deliveries from FY 97 funding		1						
Deliveries from FY 98 funding								
Deliveries from FY 99 funding								
Deliveries from subsequent years' funding					1			
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	1	1	1	2	2	2	2
Inventory Objective or Current Authorized Allowance	6	6	6	6	6	6	6	6

Inventory Objective 6	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: Febuary 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF059 Boom Mooring Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		13	16	16		4	3	
Unit Cost		9.76	10.3	10.5		11	11	
Total Cost		127	165	168		44	33	
Asset Dynamics								
Beginning Asset Position	9	9	22	38	54	54	58	61
Deliveries from all prior year funding								
Deliveries from FY 97 funding		13						
Deliveries from FY 98 funding			16					
Deliveries from FY 99 funding				16				
Deliveries from subsequent years' funding						4	3	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	9	22	38	54	54	58	61	61
Inventory Objective or Current Authorized Allowance	64	64	64	64	64	64	64	64

Inventory Objective 64	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: Febuary 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF060 Hot Tap Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			1					
Unit Cost			210					
Total Cost			210					
Asset Dynamics								
Beginning Asset Position	4	4	4	5	5	5	5	5
Deliveries from all prior year funding								
Deliveries from FY 97 funding								
Deliveries from FY 98 funding			1					
Deliveries from FY 99 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	4	4	5	5	5	5	5	5
Inventory Objective or Current Authorized Allowance	7	7	7	7	7	7	7	7

Inventory Objective 7	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF061 Viscous Oil Transfer Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			2			1	2	
Unit Cost			100			107	110	
Total Cost			200			107	220	
Asset Dynamics								
Beginning Asset Position	9	9	9	11	11	11	12	14
Deliveries from all prior year funding								
Deliveries from FY 97 funding								
Deliveries from FY 98 funding			2					
Deliveries from FY 99 funding								
Deliveries from subsequent years' funding						1	2	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	9	9	11	11	11	12	14	14
Inventory Objective or Current Authorized Allowance	28	28	28	28	28	28	28	28

Inventory Objective 28	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF062 Sub 6" Hyd Pump Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			3	1				
Unit Cost			70	72				
Total Cost			210	72				
Asset Dynamics								
Beginning Asset Position	21	21	21	24	25	25	25	25
Deliveries from all prior year funding								
Deliveries from FY 97 funding								
Deliveries from FY 98 funding			3					
Deliveries from FY 99 funding				1				
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	21	21	24	25	25	25	25	25
Inventory Objective or Current Authorized Allowance	33	33	33	33	33	33	33	33

Inventory Objective 33	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF063 VOSS Skim Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary				1			1	
Unit Cost				603			609	
Total Cost				603			609	
Asset Dynamics								
Beginning Asset Position	6	6	6	6	7	7	7	8
Deliveries from all prior year funding								
Deliveries from FY 97 funding								
Deliveries from FY 98 funding								
Deliveries from FY 99 funding				1				
Deliveries from subsequent years' funding							1	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	6	6	6	7	7	7	8	8
Inventory Objective or Current Authorized Allowance	9	9	9	9	9	9	9	9

Inventory Objective 9	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF064 Modular Barge Systems	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary					1	1		
Unit Cost					591	612		
Total Cost					591	612		
Asset Dynamics								
Beginning Asset Position						1	2	2
Deliveries from all prior year funding								
Deliveries from FY 97 funding								
Deliveries from FY 98 funding								
Deliveries from FY 99 funding								
Deliveries from subsequent years' funding					1	1		
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	0	1	2	2	2
Inventory Objective or Current Authorized Allowance	4	4	4	4	4	4	4	4

Inventory Objective 4	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No.					Date: February 1997		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
HF065 Boarding Kits	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary					1	2		
Unit Cost					40	42		
Total Cost					40	84		
Asset Dynamics								
Beginning Asset Position	3	3	3	3	3	4	6	6
Deliveries from all prior year funding								
Deliveries from FY 97 funding								
Deliveries from FY 98 funding								
Deliveries from FY 99 funding								
Deliveries from subsequent years' funding					1	2		
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	3	3	3	3	4	6	6	6
Inventory Objective or Current Authorized Allowance	10	10	10	10	10	10	10	10

Inventory Objective 10	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 14

DEPARTMENT OF THE NAVY
SUMMARY OF FUNDS BUDGETED FOR ENVIRONMENTAL PROJECTS
FY96/97

Environmental Program	FY96 Actual	FY97 Estimate	FY98 Estimate	FY99 Estimate	CHANGE FY97/FY98	CHANGE FY98/FY99
Environmental Cleanup						
Appropriation						
Media Category						
Environmental Compliance	103,166	127,492	156,775	218,621	30,383	61,846
Environmental Conservation						
Pollution Prevention						
Environmental Technology						
Base Realignment and Closure						
Environmental Programs Total	103,166	127,492	156,775	218,621	30,383	61,846

FY 1997 To FY 1998 Change Justification: This is due to the fact that different systems are being procured and unit cost per system varies depending on the system.
FY97 represents the peak year for procuring and installing Plastics Waste Processors aboard ship to meet the DEC 98 congressional deadline. Much of the FY98 increase in funding is due to initial starts for the Pulper/Shredder and the R-114 CFC Programs.
FY98 also attempts to resolve the massive FY97 R12 AC/Reefer funding cuts.

FY 1998 To FY 1999 Change Justification: This is due to the fact that different systems are being procured and unit cost per system varies depending on the system.
Eighty percent of the FY99 funding is for execution of the Pulper/Shredder and R114 CFC programs.

BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40	DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/SUBHEAD
OTHER PROCUREMENT, NAVY/BA-1 SHIP SUPPORT EQUIPMENT	SUBMARINE SILENCING EQUIPMENT/81HG BLI # 0940

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)	$5.0	$4.5	$4.3	$3.5	$3.7	$3.8	$3.9	$4.0

This program is for the procurement of special material required to implement the militarily high priority Submarine Silencing Program for operating nuclear submarines. The overall objectives and detail requirements for this program were established and defined in the CNO Specific Operational Requirements (SOR) 46-28 and NAVSEAINST C9073.2B. Only one program is in place to procure hardware system for the purpose of measuring/monitoring, assessing, and improving the detection capability/reducing the detectability of our submarines.

LABORATORY/FACILITIES UPGRADES/REFURBISHMENT (HG050, HG051)

Consists of replacing or refurbishing broken, old obsolete acquisition and analysis hardware and software prior to equipment failure and subsequently jeopardizing ship's safety (e.g. ranging equipment) or the execution of acoustic trials and completion of trials program objectives outlined in CNO Specific Operational Requirements 46-28 (assessment of ship's acoustic posture, etc.) and NAVSEAINST C9073.2B (Acoustics Surveys Policy). These planned refurbishments and replacements are especially critical in order to maintain the technological advancements recently made in the area of acoustic data acquisition under the Acoustic Measurement Facilities Improvement Program (AMFIP) East and West coasts (USNS HAYES and SEAFAC, respectively). Examples of these items include: hydrophone arrays, towed arrays, ranging and tracking systems, on-board array electronics, noise sources, shore power cables and data fiberoptic cables, data analysis systems, workstations, data storage and retrieval, communications systems, analyzers, tape recorders, accelerometers, monitors, etc. These equipments are utilized on the test vessel, the listening platform, and at the laboratories. [In FY97 and beyond, East and West Coast requirements are merged into one funding line.]

FMP INSTALLATIONS (HG51N)

Booted GRP Bow Sonar Domes are a requirement essential to the mission of the ship. Submarines without this equipment are seriously degraded with regards to sonar detection capability. Ships without this capability are at greater risk to the safety of the submarine and its crew. Submarine GRP Bow Dome Boots will be removed from inactivated submarines and installed on other operating ships.

WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/BA-1

P-1 ITEM NOMENCLATURE/SUBHEAD
SUBMARINE SILENCING EQUIPMENT/ 81HG

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
HG050	FACILITIES/LAB UPGRADES/REFURB *	A		$2,177		$3,295		$4,285		$3,504
HG051	FACILITIES/LAB UPGRADES/REFURB - WEST *	A		1,440		0		0		0
	MATERIAL TOTAL			$3,617		$3,295		$4,285		$3,504
HG5IN	FMP Installation			1,432		1,159		0		0
	GRAND TOTAL			$5,049		$4,454		$4,285		$3,504

* In FY97 and beyond, East and West Coast requirements (HG050/051) are merged into one funding line (HG050).

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

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CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | DATE: **FEBRUARY 1997**

Submarine Silencing Equipment/81HG

MODIFICATION TITLE: INSTALL SUBMARINE GRP B(Feb-97

MODELS OF SYSTEM AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: REPLACE BOOTED STEEL DOMES WITH BOOTED GRP DOME/SONAR PERFORMANCE ENHANCMENT

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																				
PROCUREMENT	10	1.190	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000			0	0.000	10	1.190
QUANTI 5.1 3.7	10																		10	0.000
INSTALLATION KITS																			0	0.000
INSTALLATION KITS NONRECURRING																			0	0.000
EQUIPMENT	10	1.190																	10	1.190
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT																			0	0.000
SUPPORT EQUIPMENT																			0	0.000
OTHER																			0	0.000
INTERIM CONTRACTOR SUPPORT																			0	0.000
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT AND PRIOR	10	2.160																	10	2.160
FY97 EQUIPMENT																			0	0.000
FY98 EQUIPMENT																			0	0.000
FY99 EQUIPMENT																			0	0.000
FY00 EQUIPMENT																			0	0.000
FY01 EQUIPMENT																			0	0.000
FY02 EQUIPMENT																			0	0.000
FY03 EQUIPMENT																				
TO COMPLETE																				
TOTAL INSTALLATION COST	10	2.160	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000			0	0.000	10	2.160
TOTAL PROCUREMENT COST		1.190		0.000		0.000		0.000		0.000		0.000		0.000				0.000	0	1.190
TOTAL COST		3.350		0.000		0.000		0.000		0.000		0.000		0.000				0.000	0	3.350

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 18 MONTHS PRODUCTION LEADTIME: 2 MONTHS

CONTRACT DATE: 06/94 PRIOR YEAR: CURRENT YEAR: 11/94 BUDGET YEAR : BUDGET YEAR 2:

PRODUCTION DELIVER DATE: 08/94 PRIOR YEAR: CURRENT YEAR: 05/95 BUDGET YEAR : BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 & PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	8,1,1,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0			10
FY97										
FY98										
FY99										
FY00										
FY01										
FY02										
FY03										

OUTPUT =====>	FY96 & PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	8,1,1,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0			10
FY97										
FY98										
FY99										
FY00										
FY01										
FY02										
FY03										

5 Domes previously installed prior to FY94
1 Dome installed in 4th quarter FY94
1 Dome installed in 4th quarter FY95

FY96 Install cost $1.060 all equipment was procurred prior to FY96.

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT P-3A

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | DATE: **FEBRUARY 1997**

Submarine Silencing Equipment/81HG

MODIFICATION TITLE: INSTALL SUBMARINE BOOTED GRP BOW DOME (HG040)

MODELS OF SYSTEM AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: REPLACE BOOTED STEEL DOMES WITH BOOTED GRP DOME/SONAR PERFORMANCE ENHANCMENT

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT	4	7.035	2	*NOTE	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000			0	0.000	6	7.035
QUANTITY	4																		4	0.000
INSTALLATION KITS																			0	0.000
INSTALLATION KITS NONRECURRING																			0	0.000
EQUIPMENT	4	7.035																	4	7.035
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT																			0	0.000
SUPPORT EQUIPMENT																			0	0.000
OTHER																			0	0.000
INTERIM CONTRACTOR SUPPORT																			0	0.000
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT AND PRIOR	4	0.820	2	1.159															6	1.979
FY97 EQUIPMENT																			0	0.000
FY98 EQUIPMENT																			0	0.000
FY99 EQUIPMENT																			0	0.000
FY00 EQUIPMENT																			0	0.000
FY01 EQUIPMENT																			0	0.000
FY02 EQUIPMENT																			0	0.000
FY03 EQUIPMENT																				
TO COMPLETE																				
TOTAL INSTALLATION COST	4	0.820	2	1.159	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000			0	0.000	6	1.979
TOTAL PROCUREMENT COST		7.035		0.000		0.000		0.000		0.000		0.000		0.000				0.000	0	7.035
TOTAL COST		7.855		1.159		0.000		0.000		0.000		0.000		0.000				0.000	0	9.014

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 18 MONTHS PRODUCTION LEADTIME: 2 MONTHS

CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: 11/94 BUDGET YEAR : BUDGET YEAR 2:

PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: 05/95 BUDGET YEAR : BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96 & PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	3,1,0,0	0,1,1,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	4
FY97										
FY98										
FY99										
FY00										
FY01										
FY02										
FY03										

OUTPUT =====>	FY96 & PY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	TOTAL
FY96 & PRIOR	2,0,1,1	0,0,2,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	4
FY97										
FY98										
FY99										
FY00										
FY01										
FY02										
FY03										

Install cost for FY96 is $.372

2 Domes installed prior to FY96

*NOTE: 2 Domes are being installed from decommisioned ships

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT P-3A

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMEN					P-1 ITEM NOMENCLATURE SUBMARINE BATTERIES (81HM) (0945)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$7.2	$9.3	$9.0	$8.9	$13.7	$13.2	$10.2	$14.3

GUPPY 1 MOD E - HM002

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. These replacement batteries for 688 class are used as the secondary underwater power sources. The MOD E battery provides the increased energy needed to extend reactor troubleshooting and recovery time for this class of submarines. That is, MOD E will support vital ship loads for nearly twice as long as the MOD C (twice as long refers to the energy delivered during a discharge and not service life) and thereby, extends operational capabilities. The replacement schedule for these batteries is predicted using continually updated usage data from each ship. Previous experience and laboratory tests indicate that MOD E batteries will need replacement after 66 months of service.

GUPPY 1 MOD C - HM001

Batteries are the primary source of submarine emergency power and are "Mission Critical". They are replacement batteries for 637/640 class submarines whose installed batteries have reached the end of their service life. Thirty-five years of experience with this battery design has established a predicable service life of 72 months. Due to the electrochemical degradation associated with batteries, service life extensions are not possible without significant reduction of system capability. Batteries must be replaced as scheduled in order to maintain fleet readiness.

PROCUREMENT/INSTALLATION ON THE FOLLOWING HULLS :

FY 98

SSN 686 at Portsmouth in AUG 98.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUBMARINE BATTERIES (81HM) (0945)

FY 98 (HM001)

SHIP (HM002)	INSTALLING AGENT	DATE
SSN 636	Portsmouth	Aug-98

FY 96

SHIP (HM002)	INSTALLING AGENT	DATE
SSN 766	Pearl Harbor	Nov-96
SSN 698	Pearl Harbor	Dec-96
SSN 697	Pearl Harbor	Jan-97
SSN 711	Pearl Harbor	Feb-97
SSN 723	Portsmouth	Feb-97
SSN 724	Pearl Harbor	Mar-97
SSN 767	Portsmouth	Apr-97

FY 97

SHIP (HM002)	INSTALLATING AGENT	DATE
SSN 763	Pearl Harbor	May-97
SSN 750	Portsmouth	May-97
SSN 701	Puget Sound	May-97
SSN 770	Pearl Harbor	Sep-97
SSN 751	Portsmouth	Sep-97
SSN 762	Pearl Harbor	Nov-97
SSN 713	Puget Sound	Nov-97
SSN 699	Portsmouth	Nov-97
SSN 771	Pearl Harbor	Dec-97
SSN 754	Puget Sound	Jun-98

SHIP (HM002)	INSTALLING AGENT	DATE
SSN 768	Portsmouth	Jul-98
SSN 705	Portsmouth	Aug-98
SSN 753	Portsmouth	Aug-98
SSN 755	Portsmouth	Nov-98
SSN 769	Portsmouth	Nov-98
SSN 716	Puget Sound	Feb-99
SSN 706	Portsmouth	Feb-99
SSN 683	Puget Sound	Apr-99

FY 99

SHIP (HM002)	INSTALLING AGENT	DATE
SSN 707	Puget Sound	May-99
SSN 714	Portsmouth	Aug-99
SSN 690	Portsmouth	Aug-99
SSN 772	Pearl Harbor	Aug-99
SSN 758	Puget Sound	Nov-99
SSN 756	Portsmouth	Nov-99
SSN 773	Pearl Harbor	Jan-00

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUBMARINE BATTERIES (81HM) (0945)

DSRV1 & 2 HM003

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. Silver Zinc Batteries provide the only power source for DSRV 1&2 rescue vehicles, which provide the Navy with a capability for personnel rescue from a disabled submarine. A complete new battery is installed when an operating set reaches the end of its estimated 15 month life cycle

Procurement Installation on the following Hulls

SHIP (HM003)	FY 96		
	DSRV-1	Deep Submergence Unit (DSU)	3 sets/yr at 3-4 months intervals
	DSRV-2	Deep Submergence Unit (DSU)	3 sets/yr at 3-4 months intervals
SHIP (HM003)	FY 97		
	DSRV-1	DSU	3 sets/yr at 3-4 months intervals
	DSRV-2	DSU	3 sets/yr at 3-4 months intervals
SHIP (HM003)	FY 98		
	DSRV-1	Deep Submergence Unit (DSU)	3 sets/yr at 3-4 months intervals
	DSRV-2	Deep Submergence Unit (DSU)	3 sets/yr at 3-4 months intervals
SHIP (HM003)	FY 99		
	DSRV-1	DSU	3 sets/yr at 3-4 months intervals
	DSRV-2	DSU	3 sets/yr at 3-4 months intervals

BUDGET ITEM JUSTIFICATION SHEET P-40A		DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUBMARINE BATTERIES (81HM) (0945)	

DSV 3 & 4 HM004

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. Deep Submergence Vehicles are designated as manned, non-combatant submersibles, which provide the Navy with underwater search and recovery capabilities to 10,000 and 20,000 feet respectively. They possess unique capabilities and characteristics to locate, recover or deploy military scientific interest items. Silver Zinc batteries are required and efficiently support Deep Submergence Vehicles (DSV) missions at these depths. A complete new battery set is installed when an operating set reaches the end of its estimated 12 month life cycle.

Procurement Installation on the following Hulls

Ship (HM004) FY 97			
DSV-3	**DSU**	**Mar 97, 98**	**1 set**
DSV-4	**DSU**	**Aug 97, 98**	**1 set**
Ship (HM004) FY 98			
DSV-3	**DSU**	**Mar 99, 00**	**1 set**
DSV-4	**DSU**	**Aug 90, 00**	**1 set**
Ship (HM004) FY 99			
DSV-3	**DSU**	**Mar 00, 01**	**1 set**
DSV-4	**DSU**	**Aug 00, 01**	**1 set**

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUBMARINE BATTERIES (81HM) (0945)

NR-1 HM005

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. The NR-1 Silver Zinc battery is a secondary underwater power source. Its function during a military or oceanographic research mission is an emergency source of power in the event of nuclear reactor shut down. A new battery is installed at the end of its 15 month life cycle.

Procurement Installation on the following Hull.

Ship (HM005) - NR-1

FY 97	Portsmouth	Apr-98
FY 98	Portsmouth	Jul-99
FY 99	Portsmouth	Oct-00
FY 00	Portsmouth	Jan-02

SILVER ZINC EMERGENCY BATTERIES HM006

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment and are utilized aboard the DSV 3 & 4 and the DSRV 1 & 2 deep submergence vehicles to activate critical components, E.G. release valves and devices, as well as emergency back-up power for the life support systems. Batteries can be installed by ships Force after a 12 month life cycle.

GFE (SILVER)

Silver is required for all DSRV, DSV, NR-1 emergency batteries, and is requisitioned from the governments reclaiming facility.

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUBMARINE BATTERIES (81HM) (0945)

TRIDENT 1 HM008

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. These are replacement batteries for all Trident class ships. Experience gained with testing at Mare Island Naval Shipyard and on board ship has shown that battery life is determined by total months in service and not total equivalent cycles. Renewal criteria for Trident is based on extensive laboratory/tests and evaluation of available operational data, resulting in an expected wet life of 72 months.

Procurement Installation on the Following Hulls

Ship (HM008)		
FY 96		
SSBN 739	Puget Sound	MAY 97
SSBN 728	Puget Sound	JUL 97
SSNB 740	Portsmouth	MAY 98
FY 97		
SSBN 734	Portsmouth	May 98
SSBN 735	Portsmouth	May 99
FY 98		
SSBN 741	Portsmouth	May 99
SSBN 730	Puget Sound	Aug 99
FY 99		
SSBN 729	Puget Sound	Oct 99
SSBN 742	Kings Bay	May 00

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA1: SHIPS SUPPORT EQUIPMEN	P-1 ITEM NOMENCLATURE SUBMARINE BATTERIES (81HM) (0945)

PRODUCTION ENGINEERING HM830

Technical support is required from Naval Surface Warfare Center (NSWC Crane FY 96). NSWC Crane receives sample cells of lead-acid batteries (all types) to perform continuous life testing until complete cell failure. The procedure is beneficial to the Navy since a cause of premature failure may be detected and corrected before the complete batteries are installed. This test program is also used to develop and verify improved operating and maintenance procedures, and application of NSSN/SEAWOLF battery technologies to other designs in order to extend service life and reduce the number of battery changeouts (reduced life cycle costs) over the life of the ship.

CLASSIFICATION: **UNCLASSIFIED**

Weapons System Cost Analysis Exhibit (P-5)	PROGRAM COST BREAKDOWN	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY R PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE BATTERIES (81HM) (0945)	

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	OP-N87									
HM001	GUPPY 1 MOD C (126 CELL)	A					1	407		
HM002	GUPPY 1 MOD E (126 CELL) SSN & SSBN'S	A	7	4,219	10	6,160	8	5,039	7	4,507
HM003	DSRV 1-2	A	2 SETS	502	2 SETS	513	3 SETS	787	3 SETS	804
HM003A	(GFE) SILVER			275		281		287		294
HM004	DSV 3-4	A			3 SETS	176	2 SETS	199	2 SETS	207
HM004A	(GFE) SILVER					167		174		178
HM005	NR-1	A			1	208	1	217	1	222
HM005A	(GFE) SILVER					68		71		73
HM006	EMERGENCY BATTERIES	A			8	63	8	66	8	67
HM006A	(GFE) SILVER					8		9		9
HM008	TRIDENT 1 TYPE (126 CELL)	A	3	1,880	2	1,281	2	1,310	2	1,339
HM830	PRODUCTION ENGINEERING			354		390		477		1,164
	TOTAL			7,230		9,315		9,043		8,864

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) | **DATE** FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE
SUBMARINE BATTERIES

SUBHEAD 81HM (0945)

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HM001	**GUPPY 1 MOD C**										
	FY 1998	UNKNOWN	C/FP	NAVSEA	Mar-98	Jan-99	1	407,000	YES	N/A	
HM002	**GUPPY 1 MOD E**										
	FY 1996	GNB	SS/OPT	NAVSEA	Feb-96	Jul-96	7	602,714	YES	NO	
	FY 1997	GNB	SS/NP	NAVSEA	Feb-97	Jul-97	10	616,000	YES	NO	
	FY 1998	GNB	SS/OPT	NAVSEA	Feb-98	Jul-98	8	629,875	YES	NO	
	FY 1999	GNB LOMBARD, IL	SS/NP	NAVSEA	Feb-99	Jul-99	7	643,857	YES	NO	
HM003	**DSRV 1-2***										
	FY 1996	YARDNEY TECH, PAWCATUCK, CT	C/FP/OPT	NAVSEA	Jan-96	Sep-96	2	251,000	YES		
	FY 1997	UNKNOWN	C/FP/OPT	NAVSEA	Feb-97	Oct-97	2	256,500	YES	NO	
	FY 1998	UNKNOWN	C/FP/OPT	NAVSEA	Jan-98	Jan-99	3	262,333	YES	NO	
	FY 1999	UNKNOWN	C/FP/OPT	NAVSEA	Jan-99	Jan-00	3	268,000	YES	NO	
HM003A	FY 1996	DISC PHILA, PA	MILSTRIP	NAVSEA	Feb-96	Feb-97	N/A	275,000	N/A		
	FY 1997	DISC PHILA PA	MILSTRIP	NAVSEA	Feb-97	Feb-98	N/A	281,000	N/A		
	FY 1998	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-98	Jan-99	N/A	287,000		N/A	
	FY 1999	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-99	Jan-00	N/A	294,000	N/A		
HM004	**DSV 3- 4***										
	FY 1997	UNKNOWN	C/FP	NAVSEA	Feb-97	Feb-98	3	58,666	YES	NO	
	FY 1998	UNKNOWN	C/FP/OPT	NAVSEA	Jan-98	Jan-99	2	99,500	YES	NO	
	FY 1999	UNKNOWN	C/FP	NAVSEA	Jan-99	Jan-00	2	103,500	YES	NO	
HM004A	FY 1997	DISC PHILA, PA	MILSTRIP	NAVSEA	Feb-97	Feb-98	N/A	167,000	N/A	N/A	
	FY 1998	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-98	Jan-99	N/A	174,000	N/A	N/A	
	FY 1999	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-99	Jan-00	N/A	178,000	N/A	N/A	

REMARKS

* DSRV 1 & 2 - ONE (1) SET CONSISTS OF (2) BATTERIES

MOD C AND MOD E BATTERIES ARE SOLE SOURCE TO GNB BECAUSE THEY ARE THE ONLY COMPANY THAT IS QUALIFIED. SECNAV MADE A DECISION THAT IT WAS NOT IN THE INTEREST OF THE NAVY TO QUALIFY ANOTHER SOURCE AND DIRECTED US TO PROCURE THESE BATTERIES FROM GNB.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE SUBMARINE BATTERIES				SUBHEAD 81HM (0945)		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HM005	**NR-1**										
	FY 1997	UNKNOWN	C/FP	NAVSEA	Feb-97	Feb-98	1	208,000	YES	NO	
	FY 1998	UNKNOWN	C/FP/OPT	NAVSEA	Jan-98	Jan-99	1	217,000	YES	NO	
	FY 1999	UNKNOWN	C/FP/OPT	NAVSEA	Jan-99	Jan-00	1	222,000	YES	NO	
HM005A	FY 1997	DISC PHILA, PA	MILSTRIP	NAVSEA	Feb-97	Feb-98	N/A	68,000	N/A	N/A	
	FY 1998	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-98	Jan-99	N/A	71,000	N/A	N/A	
	FY 1999	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-99	Jan-00	N/A	73,000	N/A	N/A	
HM008	**TRIDENT 1 TYPE**										
	FY 1996	GNB, LOMBARD, IL	C/FP	NAVSEA	Feb-96	Oct-96	3	626,666	YES	NO	
	FY 1997	GNB, LOMBARD, IL	C/FP/OPT	NAVSEA	Dec-96	Aug-97	2	640,500	YES	NO	
	FY 1998	GNB, LOMBARD, IL	C/FP/OPT	NAVSEA	Jan-98	Jul-98	2	655,000	YES	NO	
	FY 1999	GNB, LOMBARD, IL	C/FP/OPT	NAVSEA	Jan-99	Jul-99	2	669,500	YES	NO	
HM830											
	FY 1996	NSWC CRANE, IND.	WR	NAVSEA	Feb-97	Mar-97	N/A	100,000	N/A	N/A	
	FY 1996	JJ McMULLEN	LOE	NAVSEA	Mar-96	Apr-96	N/A	190,000	N/A	N/A	
	FY 1996	NSWC CRANE, IND	WR	NAVSEA	Jan-96	Sep-96	N/A	64,000	N/A	N/A	
	FY 1997	NFEC PT HEUENEM	WR	NAVSEA	Dec-96	Jan-97	N/A	45,000	N/A	N/A	
	FY 1997	JJ McMULLEN	LOE	NAVSEA	Mar-97	Jun-97	N/A	200,000	N/A	N/A	
	FY 1997	NSWC CRANE, IND	WR	NAVSEA	Oct-96	Sep-97	N/A	145,000	N/A	N/A	
	FY 1998	NSWC CRANE, IND	WR	NAVSEA	Oct-97	Sep-98	N/A	477,000	N/A	N/A	
	FY 1999	NSWC CRANE, IND	WR	NAVSEA	Oct-98	Sep-99	N/A	1,164,000	N/A	N/A	
HM006	**EMERGENCY BATTERY**										
	FY 1997	UNKNOWN	C/FP	NAVSEA	Feb-97	Feb-98	8	7,875	YES	NO	
	FY 1998	UNKNOWN	C/FP	NAVSEA	Jan-98	Jan-99	8	8,250	YES	NO	
	FY 1999	UNKNOWN	C/FP	NAVSEA	Jan-99	Jan-00	8	8,375	YES	NO	
HM006A	FY 1997	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-97	Jan-98	N/A	8,000	N/A	N/A	
	FY 1998	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-98	Jan-99	N/A	9,000	N/A	N/A	
	FY 1999	DISC PHILA, PA	MILSTRIP	NAVSEA	Jan-99	Jan-00	N/A	9,000	N/A	N/A	
REMARKS											

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OPN BA 1 : SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE SSN21 CLASS SUPPORT EQUIP H1CC (0949)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$4.9	$20.8	$6.4	$15.9	$10.7	$11.7	$11.9	$12.1

ITEM DESCRIPTION/JUSTIFICATION

INSURANCE SPARES - Based on experience gained from other submarine classes insurance spare assets are required to support a major ship program. Insurance spares will be available in the event of a catastrophic failure of a major component. These spares will support propulsion, electrical, ship control, major auxiliary systems and other SEAWOLF critical equipments which are currently in procurement for the SEAWOLF Class. Specific components to be bought have been identified based on the history of SSN-688 Class insurance spares and the specific leadtime of each spare. Insurance spares will be installed both by IMA and depot level activities depending on the equipment and the severity of casualty. Most Insurance spares will eventually transition to be rotatable pool spare initial assets prior to scheduled component replacement.

ROTATABLE POOL - Rotatable Pool for support of SEAWOLF Class planned maintenance must be procured and available in time to support the scheduled maintenance actions specified in the SEAWOLF Class Maintenance Plan. The Rotatable Pool concept meets the OPNAV requirement to reduce the duration of depot maintenance periods, reduce repair cost and increase operational availability. Increasing equipment complexity and lengthened repair turnaround times preclude ripout and reinstallation of many submarine components within planned depot availability timeframes. These spares will support propulsion, electrical, ship control, major auxiliary systems and other SEAWOLF critical equipments which are currently in production for the SEAWOLF Class. Specific components to be bought have been identified based upon design completion and ongoing logistic support analysis. Rotatable pool assets will be installed during regular ship upkeeps by IMA/Ships Force personnel and by shipyard personnel during scheduled availabilities (SRAs).

SEAWOLF SPECIFIC IMA/DEPOT EQUIPMENT - Funding within this line will provide Submarine IMAs the support equipment necessary to provide maintenance and repair services on selected SEAWOLF unique systems. Adequate depot capability must exist to repair and maintain new technology systems and equipment on SEAWOLF submarines. This includes the procurement of special support equipment, test program sets, jigs, fixtures, etc. The SEAWOLF Class Performance Monitoring Program requires the procurement of special purpose support equipment necessary for monitoring the performance of critical systems and equipment on operational ships. Prior to FY96, SEAWOLF OPN support was included in a shared budget line: HM&E under $2M.

PROGRAM COST BREAKDOWN
P-5

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OPN BA 1 : SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD: SSN21 CLASS SUPPORT EQUIPMENT/ H1CC

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	SUBMARINES (N-87)									
CC001	SSN21 CLASS SUPPORT EQUIPMENT	A		4,344		18,126		4,179		7,468
	SEAWOLF TOOLS/ EQPT under $100k			532		2,648		2,263		8,383
	TOTALS			4,876		20,774		6,442		15,851

BUDGET PROCUREMENT HISTORY AND PLANNING
P-5A

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OPN BA-1 SHIP SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: SSN21 CLASS SUPPORT EQ

SUBHEAD: H1CC

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	SUBMARINES (N87)										
	FY96										
CC001	SWI PUMP/MOTOR	Ingersoll/Dresser, NJ	SS/FFP	NAVSEA	1/96	3/98	2	226.5	YES	NO	
	HPP HYDRAULIC ACCUMULATOR	Precision Machine, R	SS/FFP	NAVSEA	1/96	1/97	1	220.0	YES	NO	
	PERISCOPE MAST (18H MOD1)	Kollmorgen, MA	SS/FFP	NAVSEA	1/97	6/99	1	1,300.0	YES	NO	
	PERISCOPE TUBE (18H MOD1)	Kollmorgen, MA	SS/FFP	NAVSEA	1/97	1/99	1	219.0	YES	NO	
	MAIN SHAFT & SHAFT SLEEVES	Electric Boat, CT	SS/FFP	NAVSEA	1/96	1/97	1	1,686.0	YES	NO	
	RADAR MAST/BPS-16	Sperry, VA	SS/FFP	NAVSEA	1/97	1/98	1	466.0	YES	NO	
	FY97										
CC001	HIGH PRESSURE AIR COMPRESSO	Rix, CA	SS/FFP	NAVSEA	1/97	6/99	3	355.0	YES	NO	
	LOW PRESSURE AIR COMPRESSOI	Nash, CT	SS/FFP	NAVSEA	1/97	3/00	1	403.0	YES	NO	
	TORPEDO EJECTION PUMP	Nash, CT	SS/FFP	NAVSEA	1/97	3/99	1	4,025.0	YES	NO	
	ASW PUMP/MTR ASSY	Electric Boat, CT	SS/FFP	NAVSEA	1/97	7/98	1	1,487.3	YES	NO	
	MAIN SEAWATER PUMP/MTR ASSY	Ingersoll/Dresser, NJ	SS/FFP	NAVSEA	1/97	12/98	1	3,163.0	YES	NO	
	SANITARY PUMP/MOTOR ASSY	Sargent, AZ	SS/FFP	NAVSEA	1/97	11/99	1	1,064.0	YES	NO	
	TRIM/DRAIN PUMP/MOTOR	Warren Pumps, MA	SS/FFP	NAVSEA	1/97	1/99	4	345.0	YES	NO	
	CHILLED WTR PUMP/MTR	Warren Pumps, MA	SS/FFP	NAVSEA	1/97	3/99	4	122.0	YES	NO	
	EAFW PUMP/MTR ASS'Y	Dresser Industries, IN	SS/FFP	NAVSEA	1/97	12/99	2	283.0	YES	NO	
	PERISCOPE MAST (8J MOD3)	Kollmorgen, MA	SS/FFP	NAVSEA	1/97	1/99	1	412.0	YES	NO	
	E&E ADAPTER ASSY (8J MOD3)	Kollmorgen, MA	SS/FFP	NAVSEA	1/97	6/99	1	584.0	YES	NO	
	E&E ADAPTER ASSY (TYPE 18H)	Kollmorgen, MA	SS/FFP	NAVSEA	1/97	6/99	1	427.0	YES	NO	
	EYEPIECE ASSY (18H MOD1)	Kollmorgen, MA	SS/FFP	NAVSEA	1/97	1/99	1	320.0	YES	NO	
	MAIN SHAFT SEAL HOUSING	Westinghouse, MA	SS/FFP	NAVSEA	1/97	1/98	1	748.0	YES	NO	
	EXTERNAL HYDRAULIC PUMPS	Sargent, AZ	SS/FFP	NAVSEA	1/97	5/98	4	115.0	YES	NO	
	HPP HYD PUMPS & MTRS	IMO Industries, MA	SS/FFP	NAVSEA	1/97	12/98	1	144.0	YES	NO	
	EPM CLUTCH	Westinghouse, PA	SS/FFP	NAVSEA	1/97	1/99	1	372.0	YES	NO	
	LOW PRESSURE BLOWER	Dresser Root, IN	SS/FFP	NAVSEA	1/97	1/98	2	334.0	YES	NO	
	CONTROLLABLE AIR FIRING VALV	Allied Signal, AZ	SS/FFP	NAVSEA	1/97	6/99	1	350.0	YES	NO	

BUDGET PROCUREMENT HISTORY AND PLANNING
P-5A

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OPN BA-1 SHIP SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: SSN21 CLASS SUPPORT EQ

SUBHEAD: H1CC

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	SUBMARINES (N87)										
	FY98										
CC001	DATA INTERFACE UNIT	Kollmorgan, MA	SS/FFP	NAVSEA	1/97	3/98	1	148.0	Yes	No	
	CAMERA ELECTRONIC ASSEME	Kollmorgan, MA	SS/FFP	NAVSEA	1/97	1/98	1	106.0	Yes	No	
	FREQUENCY CONVERTER	Kollmorgan, MA	SS/FFP	NAVSEA	1/97	6/99	1	700.0	Yes	No	
	HPP HYDRAULIC ACCUMULATO	recision Machine, R	SS/FFP	NAVSEA	1/98	6/99	3	232.0	Yes	No	
	HPP HYDRAULIC PUMP	DELAVAL, NC	SS/FFP	NAVSEA	1/98	6/99	1	148.0	Yes	No	
	LP BLOWER AND MOTOR	Dresser Industries, I	SS/FFP	NAVSEA	1/98	1/00	2	372.0	Yes	No	
	MAIN FEED PUMP MOTOR	Ingersoll Rand, NJ	SS/FFP	NAVSEA	1/98	1/99	2	238.0	Yes	No	
	MAIN CONDENSATE PMP/MTR A	Ingersoll Rand, NJ	SS/FFP	NAVSEA	1/98	1/00	1	581.0	Yes	No	
	MAIN CONDENSATE MOTOR	Ingersoll Rand, NJ	SS/FFP	NAVSEA	1/98	1/99	2	290.0	Yes	No	
	FY99										
CC001	MAIN SHAFT AND SHAFT SLEEV	Jorgensen	SS/FFP	NAVSEA	1/99	1/01	1	1,832.0	Yes	No	
	MAIN SHAFT SEAL HOUSING	Jorgensen	SS/FFP	NAVSEA	1/99	1/01	1	859.0	Yes	No	
	RUDDER AND EXTERNAL GEAR	EB Corp, CT	SS/FFP	NAVSEA	1/99	6/01	1	2,918.0	Yes	No	
	OUTER STERN DIVING PLANES	EB Corp, CT	SS/FFP	NAVSEA	1/99	6/01	1	935.0	Yes	No	
	OUTER STERN PLANES & EXT C	EB Corp, CT	SS/FFP	NAVSEA	1/99	6/01	1	924.0	Yes	No	

Exhibit P-20, Requirements Study **Main Seawater Pump/MTR ASSY**	Approp (Treas) Code/CC/BA/BSA/Item Control No **1810-BA-1**					Date **February 1997**		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 23 months		
SSN 21 Class Support EQ	PY FY96	CY FY97	BY1 FY98	BY2 FY99	BY2+1 FY00	BY2+2 FY01	BY2+3 FY02	BY2+4 FY03
Buy Summary	0	1	0	0	0	0	0	0
Unit Cost	0	3163.00	0	0	0	0	0	0
Total Cost	0	3163.00	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	1	1	1	1
Deliveries from all prior year funding								
Deliveries from CY funding				1				
Deliveries from BY1 funding					0			
Deliveries from BY2 funding						0	0	0
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	0	1	1	1	1
Inventory Objective or Current Authorized Allowance								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 17-5

Exhibit P-20, Requirements Study **Rudder & External Gear**	Approp (Treas) Code/CC/BA/BSA/Item Control No **1810-BA-1**					Date **February 1997**		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 30 months		
SSN 21 Class Support EQ	PY FY96	CY FY97	BY1 FY98	BY2 FY99	BY2+1 FY00	BY2+2 FY01	BY2+3 FY02	BY2+4 FY03
Buy Summary	0	0	0	1	0	0	0	0
Unit Cost	0	0	0	2,918.00	0	0	0	0
Total Cost	0	0	0	2,918.00	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	0	0	1	1
Deliveries from all prior year funding								
Deliveries from CY funding								
Deliveries from BY1 funding						0		
Deliveries from BY2 funding						1	0	0
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	0	0	1	1	1
Inventory Objective or Current Authorized Allowance								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 17-6

Exhibit P-20, Requirements Study **Torpedo Ejection Pump**	Approp (Treas) Code/CC/BA/BSA/Item Control No **1810-BA-1**					Date **February 1997**		
P-1 Line Item Nomenclature (Include DODIC for Ammunition Items)		Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 26 months		
SSN 21 Class Support EQ	PY FY96	CY FY97	BY1 FY98	BY2 FY99	BY2+1 FY00	BY2+2 FY01	BY2+3 FY02	BY2+4 FY03
Buy Summary	0	1	0	0	0	0	0	0
Unit Cost	0	4025.00	0	0	0	0	0	0
Total Cost	0	4025.00	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	1	1	1	1
Deliveries from all prior year funding			0					
Deliveries from CY funding				1				
Deliveries from BY1 funding					0			
Deliveries from BY2 funding								
Deliveries from subsequent years' funding						0	0	0
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	0	1	1	1	1
Inventory Objective or Current Authorized Allowance								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI
WRM Rqmt:	PY-1:	PY-1:	PY-1:	Vehicle Augment:	Attrition Res:
Pipeline:	PY-2:	PY-2:	PY-2:		BAI
Other:	PY-3:	PY-3:	PY-3:		Inactive Inv:
TOTAL:					Storage:
REMARKS:					

P-1 Shopping List Item No 17-7

Exhibit P-40, Budget Item Justification						Date **February 1997**		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Other Procurement, NAVY/1810/BA-1/BLI#0950**					P-1 Line Item Nomenclature **Strategic Platform Support Equipment (81HH)**			
Program Element for Code B Items:		Other Related Program Elements						
Cost (In Millions)	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Procurement Quantity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Cost	$4.4	$9.0	$6.4	$6.9	$6.6	$2.9	$1.9	$4.5
Total Procurement Cost	$4.4	$9.0	$6.4	$6.9	$6.6	$2.9	$1.9	$4.5

Funding in this P-1 line provides for the procurement of tactical Hull, Mechanical and Electrical (HM&E) equipment that will be installed aboard ships and in the facilities at the TRIDENT Refit Facility (TRIREFFAC) and TRIDENT Training Facility (TRITRAFAC). The TRIDENT Refit Facility is a dedicated shore support facility providing a full range of industrial support. Unlike many other programs, TRIDENT does not use tenders for industrial support, but rather depends upon the TRIREFFAC for a full range of maintenance functions. The TRITRAFAC provides the crews for the SSBN 726 Class Submarines with realistic training experience in operating and maintaining shipboard equipment.

TRIPER ASSETS (HM&E) - In order to achieve the required operational availability and not exceed a specific Engineered Availability (EA) Period, a planned, progressive incremental overhaul of the submarine is accomplished utilizing the TRIDENT PLANNED EQUIPMENT REPLACEMENT (TRIPER) Program's inventory of pretested, prestaged ready for issue equipments. TRIPER stock levels are calculated as functions of equipment change out dates, procurement lead times, repair turn around times, equipment recoverability, equipment population and safety level requirements.

HM&E ALTERATIONS - This program provides for installation Material Packages for the TRIDENT System Modernization Program (TSMP). This provides for modernization of SSBN 726 Class Submarines and dedicated Shore Support Facilities (TLCSF, TRITRAFAC (B), TRIREFFAC (B), TRITRAFAC (KB), TRIREFFAC (KB), Major Shore Spares (MSS)). Modernization is necessary in order to replace obsolete/outdated equipments with new state-of-the-art equipments to maintain or increase mission capabilities, replace or modify components/systems which have proven to be unreliable, correct design and safety problems and reduce the fleet maintenance burden. This program includes funds for installation of Noise Quieting Equipment and system/hull modifications to reduce noise transmission to meet Submarine Silencing goals.

Exhibit P-40, Budget Item Justification	Date **February 1997**
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Other Procurement, NAVY/1810/BA-1/BLI#0950**	P-1 Line Item Nomenclature **Strategic Platform Support Equipment (81HH)**

The emergence of complex and high priority TRIDENT System capability improvements to be installed during normal TRIDENT refit periods requires the utilization of specially trained and dedicated teams to ensure accelerated and correct installation of the required capability within specified time frames. Provided are comprehensive program management and execution, including planning, direction, control, installation, integration, and coordination of specifically selected safety related, mission enhancement or technical HM&E alterations.
Specifically includes: Formation of teams; coordination with the design activity; intensified system training; material receipt, inspection, and acceptance; coordination with refit facility and fleet personnel; installation, testing, and certification of the required capability; and orientation of new operators to the new installation.

TRIDENT ENGINEERED AVAILABILITY (EA) - TRIDENT EA material support funding is required to provide replacement and contingency material to support the critical path schedule during the SSBN 726 Class Submarine Engineered Availabilities (EAs) commencing in FY93 and continuing through the operational life of the submarine. This equipment is separate and exclusive of TRIPER program equipment. Funding is also required to formulate or procure complex tools and fixtures required to reduce EA scheduled durations. This program also provides funding for installation of Depot level alterations packages.

HM&E MODERNIZATION KITS - Accomplishes alterations and actions at the lowest practicable and authorized level (taking into consideration urgency, priority, capability, capacity and cost). Alterations, and upgrades to SSBN 726 Class Submarines are scheduled for accomplishment at the TRIREFFACs. This requires equipment procurement and installation, technical planning, training, and associated resources. This line provides for material procurement necessary to install the required alterations to SSBN 726 Class Submarines at the TRIREFFAC, Bangor, and the TRIREFFAC, Kings Bay.

Exhibit P-5 Cost Analysis (Page 1)				Weapon System			Date: **February 1997**			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Other Procurement, NAVY/1810/BA-1/BLI#0950**						ID Code **HH000**	P-1 Line Item Nomenclature **(81HH) Strategic Platform Support Equipment**			
WBS COST ELEMENTS **Cost (In Millions)** (Tailor to System/Item Rqmts)	ID Code	PYs Total Cost	PY FY1996 Unit Cost	PY FY1996 Total Cost	CY FY1997 Unit Cost	CY FY1997 Total Cost	BY1 FY1998 Unit Cost	BY1 FY1998 Total Cost	BY2 FY1999 Unit Cost	BY2 FY1999 Total Cost
Quantity										
Airframes/CFE										
Engine/Accessories										
CFE Avionics										
GFE Avionics										
Armament										
ECO (Flyaway)										
Nonrecurring Costs										
Tooling										
Software Costs										
Other Costs										
Subtotal Flyaway										
Airframe PGSE										
Engine PGSE										
Avionics PGSE										
Peculiar Training Eqpt										
Publications/Tech Data										
ECO (Support Items)										
Other	A			4.429		9.037		6.435		6.931
Subtotal Support Costs										
Gross-P-1 End Item Cost										
Less PY Adv Proc (by PY FY)										
Net P-1 Full Funding Cost										
Plus CY Adv Proc										
Other Non P-1 Costs										
Initial Spares										
Mods										
Total				4.429		9.037		6.435		6.931

Exhibit P-5 Cost Analysis (Page 1)							Date: **February 1997**			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Other Procurement, NAVY/1810/BA-1/BLI#0950**						ID Code **HH012**	P-1 Line Item Nomenclature **(81HH) Stretegic Platform Support Equipment TRIDENT Engineered Availability Material**			
WBS COST ELEMENTS **Cost (In Millions)** (Tailor to System/Item Rqmts)	ID Code	PYs Total Cost	PY FY1996 Unit Cost	PY FY1996 Total Cost	CY FY1997 Unit Cost	CY FY1997 Total Cost	BY1 FY1998 Unit Cost	BY1 FY1998 Total Cost	BY2 FY1999 Unit Cost	BY2 FY1999 Total Cost
Quantity										
Airframes/CFE										
Engine/Accessories										
CFE Avionics										
GFE Avionics										
Armament										
ECO (Flyaway)										
Nonrecurring Costs										
Tooling										
Software Costs										
Other Costs										
Subtotal Flyaway										
Airframe PGSE										
Engine PGSE										
Avionics PGSE										
Peculiar Training Eqpt										
Publications/Tech Data										
ECO (Support Items)										
Other	A			4.429		7.800		3.740		3.854
Subtotal Support Costs										
Gross-P-1 End Item Cost										
Less PY Adv Proc (by PY FY)										
Net P-1 Full Funding Cost										
Plus CY Adv Proc										
Other Non P-1 Costs										
Initial Spares										
Mods										
Total				4.429		7.800		3.740		3.854

Exhibit P-5 Cost Analysis (Page 1)							Date: **February 1997**			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Other Procurement, NAVY/1810/BA-1/BLI#0950**						ID Code **HH017**	P-1 Line Item Nomenclature **(81HH) Strategic Platform Support Equipment HM&E Modernization Kits**			
WBS COST ELEMENTS **Cost (In Millions)** (Tailor to System/Item Rqmts)	ID Code	PYs Total Cost	PY FY1996 Unit Cost	PY FY1996 Total Cost	CY FY1997 Unit Cost	CY FY1997 Total Cost	BY1 FY1998 Unit Cost	BY1 FY1998 Total Cost	BY2 FY1999 Unit Cost	BY2 FY1999 Total Cost
Quantity										
Airframes/CFE										
Engine/Accessories										
CFE Avionics										
GFE Avionics										
Armament										
ECO (Flyaway)										
Nonrecurring Costs										
Tooling										
Software Costs										
Other Costs										
Subtotal Flyaway										
Airframe PGSE										
Engine PGSE										
Avionics PGSE										
Peculiar Training Eqpt										
Publications/Tech Data										
ECO (Support Items)										
Other	A			.000		1.237		2.695		3.077
Subtotal Support Costs										
Gross-P-1 End Item Cost										
Less PY Adv Proc (by PY FY)										
Net P-1 Full Funding Cost										
Plus CY Adv Proc										
Other Non P-1 Costs										
Initial Spares										
Mods										
Total				.000		1.237		2.695		3.077

Exhibit P-5a, Procurement History and Planning (Page 1)				Weapon System				DATE: **February 1997**		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Other Procurement, Navy/1810/BA-1/BLI#0950**							P-1 Line Item Nomenclature **(81HH) Strategic Platform Support Equipment HH012 TRIDENT Engineered Availability Material**			
WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available
Past Year (or last yr of proc)										
FY-1996										
EA Advanced Planning	1	.188	NAVSEA		PO/FP	PSNY / Bremerton, WA	3/96	4/96	YES	N/A
EA Material	1	.400	NAVSEA		PO/FP	EB GD/EB DIV / Groton, CT	2/96	3/96	YES	N/A
EA Advanced Planning (SSBN 727)	1	3.841	NAVSEA		PO/FP	PSNY / Bremerton, WA	11/95	12/95	YES	N/A
FY-1997										
ERP/EOH Prod. Eng. & Mgt./Material	1	4.500	NAVSEA		PO/FP	PSNY / Bremerton, WA	12/96	12/96	YES	N/A
Install of Portable AFF Injection Units	1	.600	NAVSEA		PO/FP	EB GD/EB DIV / Groton, CT	2/97	4/97	YES	N/A
500 KW SSMG Set Positive Pressure	1	.196	NAVSEA		PO/FP	EB GD/EB DIV / Groton, CT	2/97	4/97	YES	N/A
CFC-12 (R-12) Ships Stores Refrig.	1	.188	NAVSEA		PO/FP	EB GD/EB DIV / Groton, CT	2/97	4/97	YES	N/A
Procure/Qual Protype Level Control	1	.283	NAVSEA		PO/FP	EB GD/EB DIV / Groton, CT	2/97	4/97	YES	N/A
Sub Mod Alterations	1	2.033	NAVSEA		PO/FP	EB GD/EB DIV / Groton, CT	2/97	4/97	YES	N/A
FY-1998										
ERP/EOH Prod. Eng. & Mgt./Material	1	3.740	NAVSEA		PO/FP	PSNY / Bremerton, WA	12/97	4/98	YES	N/A
FY-1999										
ERP/EOH Prod. Eng. & Mgt./Material	1	3.854	NAVSEA		PO/FP	PSNY / Bremerton, WA	12/98	4/99	NO	N/A

Exhibit P-5a, Procurement History and Planning (Page 1)				Weapon System				DATE: **February 1997**		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Other Procurement, Navy/1810/BA-1/BLI#0950**							P-1 Line Item Nomenclature **(81HH) Strategic Platform Support Equipment HH017 HM&E Modernization Kits**			
WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available
Past Year (or last yr of proc)										
FY-1996										
NONE										
FY-1997										
1/2" O2 Hull Stop Valve	1	.377	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	2/97	4/97	YES	N/A
D-5 Camp Cable Connectors	1	.039	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	2/97	4/97	YES	N/A
(C4) SWS 5V DC Power Supply	1	.053	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	2/97	4/97	YES	N/A
Aux. Sea Water Pump Mod.	1	.734	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	2/97	4/97	YES	N/A
Upgrade MSDS Computer H/W	1	.004	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	2/97	4/97	YES	N/A
ACB2002HRC,ACB4001 Design	1	.030	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	2/97	4/97	YES	N/A
FY-1998										
SNAP III East Coast Ships	3	.300	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/97	4/98	YES	N/A
ACB2002HRC,ACB4001 Design	1	.309	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/97	4/98	YES	N/A
SWS 70KW AC/DC Converter	1	.609	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	1/98	5/98	YES	N/A
Misc Mod Material @ TRF &TTF	1	.200	NAVSEA		PO/FP	TRIDENT Training Facility, Bangor	1/98	5/98	YES	N/A
Ship Turbine Generator Governor	1	.270	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/97	4/98	YES	N/A
Flammable /Hazardous Material Lock.	1	.135	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/97	4/98	YES	N/A
APH-16/17Relief Valve Mod.	1	.029	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/97	4/98	YES	N/A
SNAP III (Facility TTF) H/W & Assy	1	.108	NAVSEA		PO/FP	TRIDENT Training Facility, Kings Bay	12/97	4/98	YES	N/A
Rudder/FW Planes Feedback & Ball	1	.094	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/97	4/98	YES	N/A
Sanitary Tank #3 Upper/Lower Attach	1	.041	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/97	4/98	YES	N/A

Exhibit P-5a, Procurement History and Planning (Page 2)	Weapon System	DATE: **February 1997**
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Other Procurement, Navy/1810/BA-1/BLI#0950**		P-1 Line Item Nomenclatu **(81HH) Strategic Platform Support Equipment HH017 HM&E Modernization Kits**

WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available
FY-1999										
Misc Mod Material @ TRF &TTF	1	.210	NAVSEA		PO/FP	TRIDENT Training Facility, Bangor	12/98	4/99	NO	N/A
400 HZ Volt & Frequency Reg.	1	1.080	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/98	4/99	NO	N/A
Two Addtl. Fire Fighting Stations	1	.094	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/98	4/99	NO	N/A
Mod Power-On Reset Circuit	1	.040	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/98	5/99	NO	N/A
Missile Tube Heating & Cooling	1	.020	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	12/98	5/99	NO	N/A
Vapor Compressor Redesign	1	.135	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	1/99	6/99	NO	N/A
Replace (8) 5" Launcher with 6"	1	.255	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	1/99	6/99	NO	N/A
Turbine Pump Ejector System	1	.138	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	1/99	7/99	NO	N/A
SNAP III (Facility TTF) H/W	1	.147	NAVSEA		PO/FP	TRIDENT Training Facility, Bangor	1/99	7/99	NO	N/A
Sanitary Tank #3 Upper/Lower	1	.047	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	5/99	10/99	NO	N/A
Rev. 6.0 CCS TCAS Update	1	.121	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	5/99	10/99	NO	N/A
120V VAC Power Dist Panels	1	.141	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	5/99	10/99	NO	N/A
PLO Pump 5-Idler Mod	1	.158	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	5/99	10/99	NO	N/A
ASW Pump Mod	1	.158	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	5/99	10/99	NO	N/A
MSW Pump Conversion	1	.158	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	5/99	10/99	NO	N/A
ASW-16/17/18 Safe End Valves	1	.150	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	5/99	10/99	NO	N/A
MCC Vamp EEPROM	1	.025	NAVSEA		PO/FP	EB GD/EB Div/Groton, CT	5/99	10/99	NO	N/A

Exhibit P-40, Budget Item Justification					Date FEBRUARY 1997					
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **OTHER PROCUREMENT, NAVY/BA-1 SHIP SUPPORT EQUIPMENT**					P-1 Line Item Nomenclature **DSSP EQUIPMENT/81HJ**				**BLI#:0955**	
Program Element for Code B Items:				Other Related Program Elements						
		ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Procurement Qty			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Cost			$6.5	$5.1	$7.3	$7.4	$6.8	$5.9	$6.1	$6.4
Total Procurement Cost			$6.5	$5.1	$7.3	$7.4	$6.8	$5.9	$6.1	$6.4

DESCRIPTION

The Deep Submergence Systems Program (DSSP) is responsible for the procurement, life cycle support, and improvement and modernization of assigned platforms and programs. The DSSP program provides for the procurement of equipment to support the establishment and maintenance of fleet capability for a number of programs which perform submarine research and rescue, inspection, object location and retrieval from the ocean environment, and research and scientific exploration missions. DSSP procurements replace obsolete, non-supportable equipment and subsystems through phased improvement and modernization projects. These projects may include special ship alterations, field change kits, and design corrections. DSSP systems include:

DEEP SUBMERGENCE RESCUE VEHICLES (DSRV) (HJ010)

The DSRVs provide the fleet with a world-wide capability to rescue personnel from submarines disabled on the ocean floor. These funds procure field changes and modernized subsystems for the operating DSRVs MYSTIC (DSRV-1) and AVALON (DSRV-2). Since there are only two DSRVs, one of which must be on 24-hour alert-ready status to respond to a submarine rescue mission anywhere in the world, their reliability and maintainability (minimum down-time) are key to mission readiness, response time, and operational safety. The resolution of equipment deficiencies necessitates that the highest priority field changes/modernizations be completed each fiscal year.

SUBMARINE NR-1 (HJ020)

The NR-1 is a unique, one-of-a-kind nuclear-powered research and ocean engineering submarine designed for extended search, object recovery, device implantment and submerged repair, and oceanographic research missions. Its research capabilities include ocean topography and geology, and it is capable of on-site data collection on the thermal optical, biological, and acoustic environments of the deep ocean. The NR-1 is equipped with several special systems which provide the capability to perform a number of military and scientific missions, and it has been successful in recovering items of high military value from the ocean floor. (For example, the NR-1 was an important element of the space shuttle "Challenger" recovery operations.) NR-1 is also fitted with special devices, such as an external manipulator arm, to enable it to recover objects on the ocean floor. NR-1's recent refueling overhaul, which included the installation of a new sonar system, has extended its useful life for another 20 years.

DEEP SUBMERGENCE VEHICLES (DSV) (HJ050)

The TURTLE (DSV-3) and SEA CLIFF (DSV-4) are manned, non-combatant submersibles which provide the Navy with unique deep-ocean underwater location and recovery capabilities. These capabilities include the location, recovery, and deployment of items of military and scientific interest. The DSVs can also be deployed in a number of emergency situations to locate, evaluate, and in some cases retrieve objects from the deep ocean environment. They are capable of airlift by C-5A aircraft on a world-wide basis. The TURTLE has an operating depth of 10,000 feet and the SEA CLIFF, with its titanium hull, can operate at a depth of 20,000 feet.

UNMANNED VEHICLE SYSTEMS (HJ060)

The Tethered Unmanned Work Vehicle System (TUWVS) provides operational forces with an effective means of conducting ocean bottom searches, inspections, object recovery, and work operations to a depth of 5,000 feet. The Advanced Tethered Vehicle, which is cable controlled, can perform these same operations to depths of 20,000 feet. In addition, side look sonar search and inspection systems with depth capability up to 7000 feet are operated and maintained by the unmanned vehicle detachment.

SUBMARINE RESCUE CHAMBER (HJ080)

Provides world-wide capability to rescue personnel from submarines disabled on the ocean floor. SRC's can carry six rescuees per trip as compared to 24 on DSRVs. These units are 50 year old technology, simple but effective. The retirement of the ASR Class Submarine Rescue Ships required two fly-away SRC rescue kits in FY 1996.

ADS (NEWTSUIT) (HJ090)

A COTS one man, one atmosphere diving system that will provide world-wide capability in support of Submarine Rescue Chambers (SRC) mission. ADS will be used to clear disabled submarines seating surfaces, attach the SRC downhaul cable and attach salvage fittings.

EQUIPMENT INSTALLATION (HJINS)

These funds are for the installation of DSSP equipment, as well as the training equipment and items which support shore facilities.

Exhibit P-40, Budget Item Justification		Date FEBRUARY 1997	
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **OTHER PROCUREMENT, NAVY/BA-1**	**SHIP SUPPORT EQUIPMENT**	P-1 Line Item Nomenclature **DSSP EQUIPMENT/81HJ**	**BLI#:0955**
Program Element for Code B Items:		Other Related Program Elements	

SOURCES:
The sources for these acquisitions are limited. There are few private companies actively engaged in deep ocean engineering and even fewer with the specialized experience, knowledge, and facilities to meet the exacting requirements of the DSSP programs. Accordingly, sole source contracts are typically required with LESC, CSDL, and PARAMAX to continue their support of the various DSSP programs. Where possible, contracting via open competition is utilized.

REFERENCES:
Acquisition Plans 584-87 Revision 4 approved 14 July 1993.

WEAPON SYSTEM COST ANALYSIS EXHIBIT P-5	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-1	P-1 ITEM NOMENCLATURE/SUBHEAD DSSP EQUIPMENT/81HJ

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
HJ010	RESCUE/DSRV	A		$2,487		$2,329		$2,274		$2,842
HJ020	NR-1	A		1,162		1,106		1,146		1,225
HJ050	DSV (TURTLE/SEA CLIFF)	A		1,220		0		0		0
HJ060	UNMANNED VEHICLE SYSTEMS	A		297		1,200		1,343		1,568
HJ080	SUBMARINE RESCUE CHAMBERS	A		323		0		225		0
HJ090	ADS	B		0		0		125		150
	MATERIAL TOTAL			$5,489		$4,635		$5,113		$5,785
HJINS	EQUIPMENT INSTALLATION (NON-FMP)	A		1,029		475		2,156		1,641
	GRAND TOTAL			$6,518		$5,110		$7,269		$7,426

Exhibit P-5a, Procuremnt History and Planning	Weapon System	Date FEBRUARY 1997
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number OTHER PROCUREMENT, NAVY/1810/BA-1/BLI#: 0955	P-1 Line Item Nomenclature **DSSP EQUIPMENT (81HJ)** **HJ010 RESCUE/DSRV SUPPORT EQUIPMENT**	

WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Dates of First Delivery	Specs Available Now?	Date Revisions Available
FY1996										
DS/OAS FC 646	1	$113	NAVSEA		SSM5/OPTION	LMESC - S. Diego, CA	5/96	5/97	YES	N/A
List System Repl	2	$830	NAVSEA		SSM5/OPTION	LMESC - S. Diego, CA	7/96	7/97	YES	N/A
New Support Ship Rail Sys	1	$91	NAVSEA		SSM5/OPTION	LMESC - S. Diego, CA	6/96	9/96	YES	N/A
DS/OAS Spares	1	$449	NAVSEA		SSM5/OPTION	LMESC - S. Diego, CA	9/96	9/97	YES	N/A
AMP HR Meter RPL	2	$33	NAVSEA		SSM5/OPTION	CSDL - Boston, MA	7/96	7/97	YES	N/A
7.5 HP Motor Controller	2	$24	NAVSEA		SSM5/OPTION	CSDL - Boston, MA	7/96	7/97	YES	N/A
Main PRP PWR PNL (MPPP)	2	$12	NAVSEA		SSM5/OPTION	CSDL - Boston, MA	7/96	7/97	YES	N/A
EMER Ship Control Panel	2	$18	NAVSEA		SSM5/OPTION	CSDL - Boston, MA	7/96	7/97	YES	N/A
FY1997										
SSN 23 MOSUB Interface	1	$1,500	NAVSEA		SSM5/OPTION	LMESC - S. Diego, CA	2/97	10/98	YES	N/A
C-17 LTV & Fly Away Plan	1	$829	NAVSEA		SSM5/OPTION	LMESC - S. Diego, CA	2/97	10/97	NO	12/96
FY1998										
ICAD PRSSR Upgrade	3	$758	NAVSEA		SSM5/OPTION	CSDL - Boston, MA	2/99	2/00	NO	12/97
FY1999										
Pressure Capsule 3 Birdcage & Valves	2	$724	NAVSEA		SSM5/OPTION	LMESC - S. Diego, CA	2/99	2/00	YES	N/A
SSN 21 Transport SPT EQ	1	$290	NAVSEA		SSM5/OPTION	LMESC - S. Diego, CA	2/99	2/00	NO	12/98
Sub Distress Buoys	2	$492	SPAWAR		PD	SPAWAR	2/99	2/00	YES	N/A
PWR CBL RPL	2	$60	NAVSEA		SSM5/OPTION	CSDL - Boston, MA	2/99	2/00	YES	N/A

Exhibit P-5a, Procuremnt History and Planning	Weapon System	Date FEBRUARY 1997
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number OTHER PROCUREMENT, NAVY/1810/BA-1/BLI#: 0955	P-1 Line Item Nomenclature **DSSP EQUIPMENT (81HJ)** **HJ020 NR-1**	

WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Dates of First Delivery	Specs Available Now?	Date Revisions Available
FY1996										
Manipulator	1	$759.5	N/S			LMTDS	5/96	5/97	YES	N/A
Tow Release	1	$93	SUPSHIP			EBCorp	7/96	8/96	YES	N/A
BMS Test Equipment	1	$11	N/S			LESC	3/96	9/96	YES	N/A
AFT ALT. Filter	1	$22	N/S			LMTDS	2/96	8/96	YES	N/A
Damper MOD 4 VB Press	2	$26.8	N/S			EBCorp	1/96	1/96	YES	N/A
Transducer (Cost Growth)										
GPS Hand Held Unit	1	$43	N/S			LMTDS	6/96	6/97	YES	N/A
Intercom/PBU (Cost Growth)	1	$119	N/S			LMTDS	6/96	6/97	YES	N/A
IPU (Cost Growth)	1	$37	N/S			LMTDS	6/96	1/97	YES	N/A
3 KVA Static Invent	1	$24	SUPSHIP			EBCorp	7/96	1/97	YES	N/A
FY1997										
UQC/ARD 8000 Interface Unit	1	$150	N/S			LMTDS	2/97	12/97	YES	N/A
Comp Interface	1	$204	N/S			LMTDS	4/97	4/99	YES	9/97
Video REC	1	$150	N/S			LMTDS	4/97	4/98	YES	9/97
1000 W Incandecent Lighter	1	$225	N/S			LMTDS	12/96	12/97	YES	9/96
HYD Valve Replacment	1	$177	SUPSHIP			EBCorp	12/96	9/97	YES	9/96
Aft Altitude Receiver	1	$200	N/S			LMTDS	12/96	12/97	YES	N/A
FY1998										
Underwater Modem	3	$206.7	N/S			LMTDS	2/98	2/99	NO	12/97
Fiber Optic Interface Unit	2	$88	SUPSHIP			EBCorp	2/98	12/98	NO	12/97
SLS Rec/Elect	2	$175	N/S			LMTDS	4/98	4/99	YES	N/A
FY1999										
Velocimeter	1	$290	N/S			LMTDS	12/98	12/99	YES	8/98
CTD/CV	1	$271	N/S			LMTDS	2/99	2/00	YES	12/98
Horizontal Sit Display	1	$223	N/S			LMTDS	2/99	3/00	YES	N/A
I&C PWR SWC HB	1	$250	N/S			LMTDS	5/99	5/00	YES	N/A
TV Camera Replacement	1	$191	N/S			LMTDS	3/99	2/00	YES	9/98

Exhibit P-5a, Procuremnt History and Planning	Weapon System	Date FEBRUARY 1997
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number OTHER PROCUREMENT, NAVY/1810/BA-1/BLI#: 0955	P-1 Line Item Nomenclature **DSSP EQUIPMENT (81HJ)** **HJ050 DSV (TURTLE/SEA CLIFF) SUPPORT EQUIPMENT**	

WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Dates of First Delivery	Specs Available Now?	Date Revisions Available
FY1996										
DSV 4 Syntactic Foam	1	$938	NAVSEA		WX	NAVSHIPYD/PTSMH	5/96	1/97	YES	N/A
Manipulator	1	$282	NAVSEA		WX	COASTASYSSTA	7/96	10/96	YES	N/A
						Panama City, FL				

Exhibit P-5a, Procuremnt History and Planning	Weapon System	Date FEBRUARY 1997
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number OTHER PROCUREMENT, NAVY/1810/BA-1/BLI#: 0955	P-1 Line Item Nomenclature **DSSP EQUIPMENT (81HJ)** **HJ060 UNMANNED VEHICLE SYSTEMS EQUIPMENT**	

WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Dates of First Delivery	Specs Available Now?	Date Revisions Available
FY1996										
ATV Handling SYS Mods	1	$297	NAVSEA		C/OPTION	O'Tech - Upper Malboro	4/96	10/96	YES	N/A
FY1997										
ATV Handling SYS Mods	1	$500	N/S		C/OPTION	O'Tech - Upper Malboro	2/97	2/98	NO	12/96
TUWVS Fly Away Hardware & Plan	1	$700	N/S		C/OPTION	O'Tech - Upper Malboro	4/97	4/98	NO	12/96
FY1998										
TUWVS Depth Upgrade	1	$1,343	NAVSEA		C/OPTION	O'Tech - Upper Malboro	1/98	1/99	NO	12/97
FY1999										
TUWVS Tracking Upgrade	2	$175	NAVSEA		C/OPTION	O'Tech - Upper Malboro	1/00	1/01	YES	N/A
Viewing & Lighting Upgrade	2	$200	NAVSEA		C/OPTION	O'Tech - Upper Malboro	1/00	6/01	YES	N/A
Obsolete Equipment Repl	1	$818	NAVSEA		C/OPTION	O'Tech - Upper Malboro	1/00	6/01	YES	N/A

Exhibit P-5a, Procuremnt History and Planning	Weapon System	Date FEBRUARY 1997
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number OTHER PROCUREMENT, NAVY/1810/BA-1/BLI#: 0955	P-1 Line Item Nomenclature **DSSP EQUIPMENT (81HJ)** **HJ080 SUBMARINE RESCUE CHAMBERS**	

WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Dates of First Delivery	Specs Available Now?	Date Revisions Available
FY1996										
HPAC	1	$125	NAVSEA		WX	NAVSHIPYD, PTSMH	2/96	10/96	YES	N/A
SRC Air Banks	1	$99	NAVSEA		WX	NAVSHIPYD, PTSMH	2/96	10/96	YES	N/A
SPRFA Light TNR & GEN	1	$99	NAVSEA		WX	NAVSHIPYD, PTSMH	2/96	10/96	YES	N/A
FY1998										
Fly Away Hardware & Plan Spares	1	$225	NAVSEA		WX	NAVSHIPYD, PTSMH	12/98	8/99	YES	N/A

Exhibit P-5a, Procuremnt History and Planning	Weapon System	Date FEBRUARY 1997
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number OTHER PROCUREMENT, NAVY/1810/BA-1/BLI#: 0955	P-1 Line Item Nomenclature **DSSP EQUIPMENT (81HJ)** **HJ090 ADS**	

WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Dates of First Delivery	Specs Available Now?	Date Revisions Available
FY1998										
Rescue Support Tools	1	$125	NAVSEA		WX	COASTASYSSTATION	2/98	10/98	NO	12/97
FY1999										
Suit COMMS Upgrade	3	$50	NAVSEA		WX	COASTASYSSTATION	2/99	10/99	YES	N/A

MODELS OF SYSTEMS AFFECTED: MYSTIC DSRV-1/AVALON DSRV-2 TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: DEEP SUBMERGENCE RESCUE VEHICLES- HJ010

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

FINANCIAL PLAN: (TOA, $ in MILLIONS)

PROCUREMENT	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
QUANTITY																						
INSTALLATION KITS			13	2.487	2	2.329	3	2.274	7	2.842	2	2.488	6	2.511	9	2.589	13	2.722	VAR	VAR	55	20.242
INSTALLATION KITS																						
NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE																						
ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
INTERIM CONTRACTOR																						
SUPPORT																						

MODELS OF SYSTEMS AFFECTED: MYSTIC DSRV-1/AVALON DSRV-2-HJ010 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:

METHODS OF IMPLEMENTATION: VARIOUS

ADMINISTRATIVE LEADTIME: VAR MONTHS PRODUCTION LEADTIME: VAR MONTHS

CONTRACT DATES: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DELIVERY DATE: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

($ in MILLIONS)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
FY96 EQUIPMENT AND PRIOR			1	0.180	4	0.060	4	0.750	4	0.456											13	1.446
FY97 EQUIPMENT					2	0.000															2	0.000
FY98 EQUIPMENT									4	0.342											4	0.342
FY99 EQUIPMENT											3	1.089	3	0.901							6	1.990
FY00 EQUIPMENT													1	0.306	1	0.431					2	0.737
FY01 EQUIPMENT															3	1.286	3	1.879			6	3.165
FY02 EQUIPMENT																					0	0.000
FY03 EQUIPMENT																			9		9	0.000
TO COMPLETE																			13		13	0.000
TOTAL INSTALLATION COST			1	0.180	6	0.060	4	0.750	8	0.798	3	1.089	4	1.207	4	1.717	3	1.879	22	VAR	55	7.680

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
IN																															
FY96 & PR	1	0	0	0	4	2	2	0	0	0	2	0	2																		13
FY97			2																												2
FY98										2	0	0	1	0	1	0	0														4
FY99														0	3	0	0	0	3	0	0										6
FY00																		0	0	1	0	0	0	1	0						2
FY01																						0	0	3	0	0	0	3	0		6
FY02																															
FY03																														9	9
TC																														13	13
OUT																															
FY96 & PR		0	1	0	0	4	0	2	0	2	0	0	2	2	0	0	0														13
FY97							2																								2
FY98										0	0	0	3	0	0	1	0														4
FY99														0	0	3	0	0	0	3	0										6
FY00																		0	0	0	1	0	0	0	1						2
FY01																						0	0	0	3	0	0	0	3		6
FY02																															
FY03																														9	9
TC																														13	13

2 FY97 KITS NEEDS NO INSTALL FUNDING

1 FY99 KITS NEEDS NO INSTALL FUNDING

MODELS OF SYSTEMS AFFECTED: NR-1 TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: SUBMARINE NR-1- HJ020

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

FINANCIAL PLAN: (TOA, $ in MILLIONS)

RDT&E PROCUREMENT	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
QUANTITY																						
INSTALLATION KITS			10	1.162	6	1.106	7	1.146	5	1.225	3	1.311	0	0.000	0	0.000	0	0.000	VAR	VAR	31	5.950
INSTALLATION KITS																						
NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE																						
ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
INTERIM CONTRACTOR																						
SUPPORT																						

MODELS OF SYSTEMS AFFECTED: NR-1 HJ020 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:

METHODS OF IMPLEMENTATION: VARIOUS

ADMINISTRATIVE LEADTIME: VAR MONTHS PRODUCTION LEADTIME: VAR MONTHS

CONTRACT DATES: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DELIVERY DATE: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

($ in MILLIONS)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
FY96 EQUIPMENT AND PRIOR			3	0.410	6	0.141															9	0.551
FY97 EQUIPMENT							5	0.691	1	0.103											6	0.794
FY98 EQUIPMENT									7	0.700											7	0.700
FY99 EQUIPMENT											5	0.187									5	0.187
FY00 EQUIPMENT													3	0.517							3	0.517
FY01 EQUIPMENT																						
FY02 EQUIPMENT																						
FY03 EQUIPMENT																						
TO COMPLETE																						
TOTAL INSTALLATION COST			3	0.410	6	0.141	5	0.691	8	0.803	5	0.187	3	0.517	0	0.000	0	0.000	0	0.000	30	2.749

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
IN																															
FY96 & PR	3	0	0	3	3																										9
FY97						3	2	0	0	1	0	0	0																		6
FY98										2	3	2	0																		7
FY99														1	3	1	0														5
FY00																		2	1	0	0										3
FY01																															0
FY02																															0
FY03																															0
OUT																															
FY96 & PR	3	0	0	3	3																										9
FY97						3	2	0	0	1	0	0	0																		6
FY98										2	3	2	0																		7
FY99														1	3	1	0														5
FY00																		2	1	0	0										3
FY01																															0
FY02																															0
FY03																															0

1. 1 FY96 KIT IS INSTALLED BY SHIPS FORCE

MODELS OF SYSTEMS AFFECTED: TURTLE DSV-3/SEA CLIFF DSV-4 TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: DEEP SUBMERGENCE VEHICLES - HJ050

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

FINANCIAL PLAN: (TOA, $ in MILLIONS)

RDT&E PROCUREMENT	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
QUANTITY																						
INSTALLATION KITS	2	0.211	2	1.220	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	VAR	VAR	4	1.431
INSTALLATION KITS																						
NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE																						
ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
INTERIM CONTRACTOR																						
SUPPORT																						

MODELS OF SYSTEMS AFFECTED: TURTLE DSV-3/SEA CLIFF DSV-4 - HJ050 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:

METHODS OF IMPLEMENTATION: VARIOUS

ADMINISTRATIVE LEADTIME: VAR MONTHS PRODUCTION LEADTIME: VAR MONTHS

CONTRACT DATES: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DELIVERY DATE: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

($ in MILLIONS)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
FY96 EQUIPMENT AND PRIOR			1	0.369	1	0.242	2	0.650													4	1.261
FY97 EQUIPMENT																						
FY98 EQUIPMENT																						
FY99 EQUIPMENT																						
FY00 EQUIPMENT																						
FY01 EQUIPMENT																						
FY02 EQUIPMENT																						
FY03 EQUIPMENT																						
TO COMPLETE																						
TOTAL INSTALLATION COST			1	0.369	1	0.242	2	0.650	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	4	1.261

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
IN																															
FY96 & PR	1	1	0	0	0	2	0	0	0																						4
FY97																															0
FY98																															0
FY99																															0
FY00																															0
FY01																															0
FY02																															0
FY03																															0
OUT																															
FY96 & PR	1	0	1	0	0	0	2	0	0																						4
FY97																															0
FY98																															0
FY99																															0
FY00																															0
FY01																															0
FY02																															0
FY03																															0

MODELS OF SYSTEMS AFFECTED: TETHERED UNMANNED WORK VEHICLE SYSTEM TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: DEEP SUBMERGENCE RESCUE VEHICLES - HJ060

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

FINANCIAL PLAN: (TOA, $ in MILLIONS)

RDT&E PROCUREMENT	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
QUANTITY																						
INSTALLATION KITS	3	0.030	1	0.297	2	1.200	1	1.343	5	1.568	2	1.500	1	1.487	1	1.540	1	1.542	VAR	VAR	17	10.507
INSTALLATION KITS																						
NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE																						
ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
INTERIM CONTRACTOR																						
SUPPORT																						

MODELS OF SYSTEMS AFFECTED: TETHERED UNMANNED WORK VEHICLE SYSTEM-HJ060 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:

METHODS OF IMPLEMENTATION: VARIOUS

ADMINISTRATIVE LEADTIME: VAR MONTHS PRODUCTION LEADTIME: VAR MONTHS

CONTRACT DATES: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DELIVERY DATE: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

($ in MILLIONS)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
FY96 EQUIPMENT AND PRIOR			1	0.070	2	0.032	1	0.000													4	0.102
FY97 EQUIPMENT							1	0.065	1	0.010											2	0.075
FY98 EQUIPMENT									1	0.010											1	0.010
FY99 EQUIPMENT									1	0.010	4	0.030									5	0.040
FY00 EQUIPMENT													2	0.010							2	0.010
FY01 EQUIPMENT															1	0.070					1	0.070
FY02 EQUIPMENT																	1	0.010			1	0.010
FY03 EQUIPMENT																			1	VAR	1	0.000
TO COMPLETE																					0	0.000
TOTAL INSTALLATION COST			1	0.070	2	0.032	2	0.065	3	0.030	4	0.030	2	0.010	1	0.070	1	0.010	1	VAR	17	0.317

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
IN																															
FY96 & PR	1	0	2	0	0																										3
FY97						1	0	0	0																						1
FY98									1	0	2	0	0																		3
FY99														0	5	0	0														5
FY00																		0	2	0	0										2
FY01																						0	1	0	0						1
FY02																										0	1	0	0		1
FY03																														1	1
OUT																															
FY96 & PR		1	0	2	0																										3
FY97						0	0	1	0																						1
FY98										1	2	0	0																		3
FY99														0	0	5	0														5
FY00																		0	0	2	0										2
FY01																						0	0	1	0						1
FY02																										0	0	1	0		1
FY03																														1	1

* FY96 KIT NEEDS NO INSTALL FUNDING

MODELS OF SYSTEMS AFFECTED: SRC TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: SUBMARINE RESCUE CHAMBER - HJ080

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

FINANCIAL PLAN: (TOA, $ in MILLIONS)

RDT&E PROCUREMENT	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
QUANTITY																						
INSTALLATION KITS			3	0.323	0	0.000	1	0.225	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	VAR	VAR	4	0.548
INSTALLATION KITS																						
NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE																						
ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
INTERIM CONTRACTOR																						
SUPPORT																						

MODELS OF SYSTEMS AFFECTED: SRC - HJ080 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:

METHODS OF IMPLEMENTATION: VARIOUS

ADMINISTRATIVE LEADTIME: VAR MONTHS PRODUCTION LEADTIME: VAR MONTHS

CONTRACT DATES: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DELIVERY DATE: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

($ in MILLIONS)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
FY96 EQUIPMENT AND PRIOR			3	0.0																	3	0.000
FY97 EQUIPMENT																					0	0.000
FY98 EQUIPMENT							1	0.0													1	0.000
FY99 EQUIPMENT																					0	0.000
FY00 EQUIPMENT																					0	0.000
FY01 EQUIPMENT																					0	0.000
FY02 EQUIPMENT																					0	0.000
FY03 EQUIPMENT																					0	0.000
TO COMPLETE																					0	0.000
TOTAL INSTALLATION COST			3	0.000	0	0.000	1	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	4	0.000

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
IN																															
FY96 & PR	3																														3
FY97																															0
FY98							1																								1
FY99																															0
FY00																															0
FY01																															0
FY02																															0
FY03																															0
OUT																															
FY96 & PR																															0
FY97			1		2																										3
FY98																															0
FY99												1																			1
FY00																															0
FY01																															0
FY02																															0
FY03																															0

1. NO INSTALLATION FUNDIGN IS REQUIRED FOR ANY HARDWARE PROCURED

MODELS OF SYSTEMS AFFECTED: ADS TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: ATMOSPHERIC DIVING SUIT (NEWTSUIT) - HJ090

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

FINANCIAL PLAN: (TOA, $ in MILLIONS)

RDT&E PROCUREMENT	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
QUANTITY																						
INSTALLATION KITS*			0	0.000	0	0.000	1	0.125	3	0.150	4	0.175	7	0.200	5	0.225	2	0.250	VAR	VAR	22	1.125
INSTALLATION KITS																						
NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE																						
ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
INTERIM CONTRACTOR																						
SUPPORT																						

MODELS OF SYSTEMS AFFECTED: ADS - HJ090 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:

METHODS OF IMPLEMENTATION: VARIOUS

ADMINISTRATIVE LEADTIME: VAR MONTHS PRODUCTION LEADTIME: VAR MONTHS

CONTRACT DATES: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DELIVERY DATE: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

($ in MILLIONS)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
FY96 EQUIPMENT AND PRIOR																					0	0.000
FY97 EQUIPMENT																					0	0.000
FY98 EQUIPMENT																					0	0.000
FY99 EQUIPMENT																					0	0.000
FY00 EQUIPMENT																					0	0.000
FY01 EQUIPMENT																					0	0.000
FY02 EQUIPMENT																					0	0.000
FY03 EQUIPMENT																					0	0.000
TO COMPLETE																					0	0.000
TOTAL INSTALLATION COST			0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
IN																															
FY96 & PRIOR																															0
FY97																															0
FY98							1																								1
FY99										1	1	1																			3
FY00														1	1	1	1														4
FY01																		2	2	2	1										7
FY02																						2	1	1	1						5
FY03																										1	1				2
OUT																															
FY96 & PRIOR																															0
FY97																															0
FY98																															0
FY99																															0
FY00																															0
FY01																															0
FY02																															0
FY03																															0

1. EXCEPT FOR FY98 HARDWARE PROCUREMENT ADS PROGRAM IS NOT EXPECTED TO REQUIRE INSTALLATION FUNDING.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE MINESWEEPING EQUIPMENT (71UQ) Line Item #097500

	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$0.1	$4.0	$4.9	$0.4	$0.7	$0.4	$0.4	$0.4

ITEM DESCRIPTION/JUSTIFICATION:

Provide systems, subsystems, and engineering change kits for minesweeping and mine neutralization systems used by the surface MCM force. Systems and equipments are used for magnetic, acoustic, and mechanical type minesweeping systems, plus the AN/SLQ-48 (MNS) for mine neutralization. Engineering change kits improve reliability and maintainability and correct deficiencies to allow equipment to perform in accordance with specified requirements.

SLQ-48 (UPGRADE) (UQ013) - Funding is to procure retrofit kits for the SLQ-48 MNS and Handling System to improve vehicle maneuverability and system interoperability.

MAGNETIC SWEEP CABLES (UQ014) - The Magnetic Minesweeping Cables provide MCM-1 Class ships with the capability of magnetic minesweeping. Types of cables to be procured are S-3, CL-3, and Q3.

PRODUCTION ENGINEERING (UQ830) - Production Engineering in support of the above procurements. This includes conduct of first article tests, factory acceptance tests, and other production support efforts directly related to delivery of the hardware.

CLASSIFICATION: **UNCLASSIFIED**

WEAPON SYSTEM COST ANALYSIS EXHIBIT
P-5

DATE: **FEBRUARY 1997**

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/
BA-1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
MINESWEEPING EQUIPMENT (71UQ)

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	MINE WARFARE, N852									
UQ013	AN/SLQ-48 UPGRADE			59		3,198		4,389		
UQ014	MAGNETIC SWEEP CABLES				11	700	6	398	6	397
UQ830	PRODUCTION ENGINEERING					67		103		
UQ900	CONSULTING SERVICES					40		50		
	TOTAL			59		4,005		4,940		397

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT
P-5A

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY/BA-1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: MINESWEEPING EQUIPMENT

SUBHEAD: 71UQ

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
UQ014	FY 1997										
	MAG SWEEP CABLES										
	S3	BIW	C/FFP	NAVSEA	12/96	5/97	4	80.5	YES	NO	
	CL-3	BOSTON, MA	C/FFP	NAVSEA	12/96	4/97	7	54.0	YES	NO	
	FY 1998										
	MAG SWEEP CABLES										
	S3	UNKNOWN	C/FFP	NAVSEA	12/97	5/98	2	79.0	YES	NO	
	CL-3	UNKNOWN	C/FFP	NAVSEA	12/97	4/98	4	60.0	YES	NO	
	FY 1999										
	MAG SWEEP CABLES										
	S3	UNKNOWN	C/FFP	NAVSEA	12/98	5/99	2	78.5	YES	NO	
	CL-3	UNKNOWN	C/FFP	NAVSEA	12/98	4/99	4	60.0	YES	NO	

REMARKS

CLASSIFICATION: **UNCLASSIFIED**

REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B								DATE FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-1: SHIPS SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE MINESWEEPING EQUIPMENT (71UQ)				
ITEM/PROJECT UNIT	TOTAL I0 / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 97 PROGRAM FUNDS	PLANNED BUDGET YEARS PROCUREMENT 98 99	BALANCE	PHASING RATIONALE
MAGNETIC SWEEP CABLES								
S3	28	0	0	0	4	2 2	20	FUNDING CONSTRAINTS
CL-3	28	0	0	0	7	4 4	13	FUNDING CONSTRAINTS
COST CODE: UQ014 MAGNETIC SWEEP CABLES FOR EACH CABLE TYPE, ONE FOR EACH MCM SHIP (14) AND 14 READY-FOR-ISSUE IN THE SUPPLY SYSTEM. TOTAL = 28 EACH								

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EC**					**P-1 ITEM NOMENCLATURE** **HM &E ITEMS UNDER $2 MILLION (81HK) 0980)**			
	FY 1996	**FY 1997**	**FY 1998**	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**
QUANTITY								
COST (In Millions)	**$33.8**	**$28.8**	**$51.1**	**$84.6**	**$75.1**	**$55.3**	**$36.9**	**$38.9**

This request provides support for all "S" cognizance equipment for submarines, surface ships, and aircraft carriers which are not in any specific category. These components will be used to accomplish both shipyard/type commander alterations, fill Fleet requisitions from casualties, attrition, etc. as well as procure allowance items as required by the Consolidated Shipboard Allowance List. The following is a breakout of these items:

HK052 - PERFORMANCE MONITORING PROGRAM - A maintenance concept which entails identifying, acquiring, and analyzing performance data of critical operational SSN ship systems without costly open and inspect methods. The results of this program yield the material condition assessment and operational readiness of deployed submarines on a continuing basis to safely and reliably extend their operating cycles between overhauls. These funds are required to procure specialized support and test equipment (E.G. Thermal Imaging, Vibration Monitoring, Ultrasonic Flowmeter, etc.) essential to obtaining (non-inclusively) accurate technical data for engineering analysis.

HK830 - PRODUCTION ENGINEERING (N87, N86, AND N88) - The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD), Program Support Data (PSD), and Allowance Parts List (APL); engineering support for final design reviews. This work can be accomplished by NAVSSES as the in service Engineering agent, other Naval activities or contractors as appropriate.

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE HM&E ITEMS UNDER $2 MILLION (81HK) (0980)

HK067 - SEMMSS (ASSESSMENT OF EQUIPMENT CONDITION) - This supports the CNO mandated program to provide engineering repair decisions for the near term availabilities by executing condition assessment of all shipboard systems. These funds are for the initial outfitting and periodic replacement of the AEC Performance Monitoring Team's Test, Measurement and Diagnostic Equipment (TMDE) Inventories. The TMDE Inventories are comprised of electrical, electronic mechanical and electromechanical test equipment used to measure operating parameters of shipboard systems/equipment's. To fully support the program, each team (5 teams) will have TMDE inventories of 400 individual items. Many of these items are specialized, high-technology, high costs, instruments not O&M,N supportable. Applicable Ships in FY 90 were DD-933 Class (ALL), CG-47 Class, (ALL) FFG-7 Class. The increase in FY 92/93 results from the expansion of the program to all surface ship vice the four ship classes supported in FY 90. The increase provides the AEC PMT's with the TMDE needed to perform equipment condition assessment on 27 ship classes (300 ships). Examples of the new and replacement TMDE are: moisture analyzer, hydrometer, oxygen leak detector, flowmeter, vibration monitoring equipment's, anameter, electrical/motorized megger, etc.

HK213 - LANDING CRAFT AIR CUSHION (LCAC) - Beginning in FY 94, the HK213 line will fund material procurement and shipalt installation and design for the LCAC Fleet Modernization Program (FMP). Funds in this line are for modifications on the craft to enhance military capabilities directed by CNO or technical characteristics when warranted by reason of safety, reliability and/or cost effectiveness. Advanced technology used in LCAC demands constant and continual modifications to ensure proper mission performance and maintain craft configuration to those new craft. There is a direct relationship between the number of LCAC both delivered and planned and the funding in the program line. In addition, funding will also support modification on two Full Mission Trainers (FMT). Total planned inventory is 84; 67 craft have been delivered to date with approximately one craft being delivered each month.

HK261 - MACHALTs - The Machinery Alteration Program (MACHALT) is a program that permits changes to HM&E equipment and systems where the changes are contained within the boundaries of the individual equipment or systems and have limited system ramifications. The MACHALT program enables changes to be accomplished in a more expeditious manner and eliminate them from the formal SHIPALT process. MACHALTs are most effective for multi-class alterations. One MACHALT can replace several SHIPALTs in the system.

HK122 -363 TON AIR CONDITIONER - This program procures and installs Air Conditioning Plants on CVN-68 Class. It provides the necessary Air Conditioning capacity to keep pace with installed and planned installations of systems and equipment requiring Air Conditioning or chilled water for operation. This program is part of the aircraft carrier critical distributive systems program.

BUDGET ITEM JUSTIFICATION SHEET P-40A	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE HM&E ITEMS UNDER $2 MILLION (81HK) (0980)

HK5IN - INSTALLATION OF EQUIPMENT - Funding is for the installation of equipment including Fleet Modernization Program Installation, installation of training equipment, and installation of equipment in other shore facilities.

HK068 - COMMAND AND CONTROL UPGRADES - Modifications to enhance extensive communications, and support for Fleet Commanders and embarked staff.

HK262, HK263, HK265, HK266, LHA MIDLIFE UPGRADE - REVERSE OSMOSIS, BALLAST//DEBALLAST, UPGRADE CHT SYSTEMS, STAR ROTARY COMPRESSORS, 300 TON A/C PLANT - This program supports material procurement and installation of engineering solutions developed as part of the LHA Mid-Life Maintenance Upgrade Program. This program is a joint OPNAV, CINCLANTFLT, SURFLANT, CINCPACFLT, and SURFACE initiative to resolve maintenance deficiencies, increase readiness and reduce future maintenance costs enabling the ships to reach their service life. Joint Fleet Priority # 600 as assigned by OPNAV; NAVSEA, TYPE COMMANDER and LHA Mid Life Management team, will procure and install CHT Systems Upgrades, Star Rotary Compressors, and 300 Ton A/C Plant, Reverse Osmosis Desalination units.

HKDSA DESIGN SERVICES ALLOCATION - The Budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 & out.

HK214, FUEL OIL PURIFIERS - These self-cleaning purifiers are critical to fuel cleanliness for Gas Turbine operation and will replace existing ones that are no longer repairable or supportable by the original manufacturer.

P-1 SHOPPING LIST ITEM NO.	PAGE NO.	CLASSIFICATION:
21	3	UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS
EXHIBIT (P-5) PROGRAM COST BREAKDOWN

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY BA 1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
HM&E ITEMS UNDER $2 MILLION (81HK) (0980)

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	N85 EXPENDITONARY WARFARE									
HK213	MOD KITS LAND CRAFT CUSHION	A		6,571		4,429		0		16,219
HK214	F. O. PURIFIER	A		1,200						
HK260	CIRC PUMP MOTORS	A							2	120
HK262	REVERSE OSMOSIS	A					4	1,800		
HK263	UPGRADE CHT SYSTEMS	A			3	507	3	578	3	600
HK264	STAR ROTARY COMPRESSORS	A			4	831	4	820	4	860
HK265	300 TON AC PLANTS	A			1	961	1	1,000	1	1,000
HK266	BALLAST DEBALLAST						3	653		
HK267	CARGO HANDLING MONORAIL	A							1	490
	SUBTOTAL N85			7,771		6,728		4,851		19,289
	SURFACE N86									
HK067	SEMMSS	A		1,092		800		859		788
HK068	COMMAND & CONTL UPGRADES	A					6	6,200		
HK261	MACHALTS	A		1,325		6,191		7,500		7,195
HK830	PRODUCTION ENGINEERING	A		308		240		259		243
	SUBTOTAL N86			2,725		7,231		14,818		8,226

CLASSIFICATION: UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	PROGRAM COST BREAKDOWN	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD HM&E ITEMS UNDER $2 MILLION (81HK) (0980)	

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	SUBMARINES (N87)									
HK052	PERFORMANCE MONITOR	A		243						
	INSURANCE SPARES									
	SUBTOTAL N87			243						
	AIRCRAFT CARRIERS (N88)									
HK830	PRODUCTION ENGINEERING	A								
HK122	363 TON A/C PLANT	A			1	1,367	1	1,301	2	3,158
	SUBTOTAL (N88)					1,367		1,301		3,158
	TOTAL EQUIPMENT			10,739		15,326		20,970		30,673
HK5IN	INSTALLATION OF EQUIPMENT "K" ALT/"D" ALT			$23,013		$13,476		$24,254		$46,026
HKDSA	DESIGN SERVICES ALLOCATION							5,835		7,853
	SUBTOTAL INSTALLATION			23,013		13,476		30,089		53,879
	GRAND TOTAL			$33,752		$28,802		$51,059		$84,552

CLASSIFICATION:		UNCLASSIFIED									
			BUDGET PROCUREMENT HISTORY AND PLANNING							DATE	
				P-5A						FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OTHER PROCUREMENT NAVY BA 1:											
	SHIPS SUPPORT EQUIPMENT				HM&E ITEMS UNDER $2 MILLION						81HK (0980)
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HK052	PERFORMANCE MONITOR										
	FY 1996	NSWC CARDEROCK, MD	WX	NAVSEA	Jul-96	Jul-97		105,000	N/A		
	FY 1996	GSA	MP	NAVSEA	Jul-96	Aug-97		138,000	N/A		
HK213	LAND CRAFT CUSHION										
	FY 1996	NSWC PANA CITY FL	WX	NAVSEA	Jul-96	Jul-97		265,000			
	FY 1996	SUPSHIP NEW ORLEANS	PD	NAVSEA	Jun-96	Jun-97		524,000			
	FY 1996	NSY PUGET SOUND	WX	NAVSEA	Mar-96	Mar-97		3,333,000			
	FY 1996	NSWC PANA CITY FL	WX	NAVSEA	May-96	May-97		2,209,000			
	FY 1996	TRW	LOE	NAVSEA	Jun-96	Jun-97		240,000			
	FY 1997	SUPSHIP N.O.	PD	NAVSEA	Feb-97	Sep-98		400,000			
	FY 1997	UNKNOWN	LOE	NAVSEA	May-97	May-98		1,800,000			
	FY 1997	NSY PUGET SOUND	WX	NAVSEA	Apr-97	Apr-98		1,929,000			
	FY 1997	UNKNOWN	C/FP	NAVSEA	May-97	May-98		300,000			
	FY 1999	PUGET SOUND NSY	WX	NAVSEA	Feb-99	Feb-00		927,000			
	FY 1999	UNKNOWN	LOE	NAVSEA	Feb-99	Feb-00		496,000			
	FY 1999	UNKNOWN	C/FP	NAVSEA	Feb-99	Jul-00		14,796,000			
HK260	CIRC PUMP MOTOR										
	FY 1999	UNKNOWN	C/FP	NAVSEA	Apr-99	Apr-00	2	60,000	YES	NO	
HK267	CARGO HANDLING										
	FY 1999	UNKNOWN	C/FP	NAVSEA	Oct-98	Mar-99	1	490,000	YES	NO	
HK266	BALLAST/DEBALLAST										
	FY 1998	UNKNOWN	C/FP	NAVSEA	May-98	May-99	3	217,666	YES	NO	
REMARKS											
				P-1 SHOPPING LIST					CLASSIFICATION:		
				ITEM NO.	PAGE NO.						
				21	6				UNCLASSIFIED		

CLASSIFICATION:		UNCLASSIFIED									
			BUDGET PROCUREMENT HISTORY AND PLANNING							DATE	
				P-5A							FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OTHER PROCUREMENT NAVY BA 1:									81HK (0980)		
	SHIPS SUPPORT EQUIPMENT				HM&E ITEMS UNDER $2 MILLION						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HK122	363 TON A/C PLANTS										
	FY 1997	UNKNOWN	C/FP	NAVSEA	Aug-97	Aug-99	1	1,367,000	YES	NO	
	FY 1998	UNKNOWN	OPT	NAVSEA	Feb-98	Feb-00	1	1,301,000	YES		
	FY 1999	UNKNOWN	OPT	NAVSEA	Feb-99	Feb-01	2	1,579,000	YES		
HK067	SEMMSS										
	FY 1996	NSWC PHILA, PA	PX	NAVSEA	Apr-96	Apr-97	N/A	1,092,000	N/A		
	FY 1997	NSWC PHILA, PA	WR	NAVSEA	Dec-96	Dec-97	N/A	800,000	N/A		
	FY 1998	UNKNOWN	WX	NAVSEA	Mar-98	Mar-99	N/A	859,000	N/A		
	FY 1999	UNKNOWN	WX	NAVSEA	Mar-99	Mar-00	N/A	788,000	N/A		
HK261	MACHALTS										
	FY 1996	NSWC PHILA, PA	WX	NAVSEA	Apr-96	May-97	N/A	1,325,000	N/A		
	FY 1997	NSWC PHILA, PA	WR	NAVSEA	Dec-96	Dec-97	N/A	6,191,000	N/A		
	FY 1998	NSWC PHILA, PA	WX	NAVSEA	Mar-98	Mar-99	N/A	7,500,000	N/A		
	FY 1999	NSWC PHILA, PA	WX	NAVSEA	Feb-99	Feb-00	N/A	7,195,000	N/A		
HK263	UPGRADE CHT SYSTEMS										
	FY 1997	SPCC MECH, PA	RC	NAVSEA	Jul-97	Jul-98	3	169,000	YES		
	FY 1998	SPCC MECH, PA	RC	NAVSEA	Feb-98	Feb-99	3	192,666	YES		
	FY 1999	SPCC MECH, PA	RC	NAVSEA	Feb-99	Feb-00	3	200,000	YES		
HK264	STAR ROTARY										
	FY 1997	UNKNOWN	C/FP	NAVSEA	May-97	May-98	4	207,750	YES		
	FY 1998	UNKNOWN	OPT	NAVSEA	Feb-98	Feb-99	4	205,000	YES		
	FY 1999	UNKNOWN	OPT	NAVSEA	Feb-99	Feb-00	4	215,000	YES		
HK265	300 TON AC PLANTS										
	FY 1997	YORK, YORK, PA	SS/FP	NAVSEA	Jul-97	Jul-98	1	961,000	YES		
	FY 1998	UNKNOWN	OPT	NAVSEA	Feb-98	Feb-99	1	1,000,000	YES		
	FY 1999	UNKNOWN	OPT	NAVSEA	Feb-99	Feb-00	1	1,000,000	YES		
HK068	COMMAND AND CONTROL UPGRADE										
	FY 1998	UNKNOWN	C/FP	NAVSEA	Mar-98	Jun-99	6	1,033,333	N/A		
HK262	REVERSE OSMOSIS										
	FY 1998	UNKNOWN	C/FP	NAVSEA	Jun-98	Jun-99	4	450,000	YES		
REMARKS											
	* SEE FUNDING REALIGNMENT SHEET										
				P-1 SHOPPING LIST					CLASSIFICATION:		
				ITEM NO.	PAGE NO.						
				21	7				UNCLASSIFIED		

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: FUEL/OIL PURIFIER

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT	1																		1	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.2																	0.0	1.2
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
																			0	0.0
FY96 & PRIOR EQUIPMENT	1	0.8																	1	0.8
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																				
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST	1	0.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0			1	0.8
TOTAL PROCUREMENT COST		1.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0			0	1.2
TOTAL COST		2.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0			0	2.0

METHOD OF IMPLEMENTATION: CONTRACT MOD | ADMINISTRATIVE LEADTIME: 9 | PRODUCTION LEADTIME: 12

CONTRACT DATE: | PRIOR YEAR: Feb-97 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: Feb-98 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	1									1

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	1									1

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CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: CONSTANT TENSION WINCH (CTW)/SLEWING ARM DAVIT (SLAD)

DESCRIPTION/JUSTIFICATION: This system, consisting of a winch and an independent power supply, is designed to provide a CTW/SLAD that improves safety of the Rigid Inflatable Bost (RIB) handling operations and reduces top side weight. The system will also allow RIB operations in higher sea states. Installation will be made on the following ship classes: FFG-7, CG-47, DD-963, DDG-993.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY96 PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	10																		10	0.0
QUANTITY																			0	0.0
INSTALLATION KITS		2.0																	0	2.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT																			0	0.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	10	1.5																	10	1.5
FY96 EQUIPMENT																			0	0.0
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																				0.0
FY01 EQUIPMENT																				0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																				
TOTAL INSTALLATION COST	10	1.5	0	0.0															10	1.5
TOTAL PROCUREMENT COST		2.0		0.0		0.0		0.0		0.0		0.0				0.0		0.0		2.0
TOTAL COST		3.5		0.0		0.0		0.0		0.0		0.0				0.0		0.0		3.5

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: 6 MOS — PRODUCTION LEADTIME: 9 MONTHS

CONTRACT DATE: — PRIOR YEAR: Jun-93 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: — PRIOR YEAR: Mar-94 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT ========>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	10									10

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	10									10

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: STAR ROTARY (LHA MIDLIFE UPGRADE)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 96 & PRIOR		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03	TO COMP	TO COMP	TOTAL	TOTAL
	QTY		QTY		QTY		QTY		QTY		QTY		QTY		QTY	QTY	COST	QTY	COST
FINANCIAL PLAN (IN MILLIONS)																			
RDT&E																		0	0.0
PROCUREMENT																		0	0.0
QUANTITY		4		4		4		8										20	0.0
INSTALLATION KITS																		0	0.0
INSTALLATION KITS NONRECURRING																		0	0.0
EQUIPMENT		0.8		0.8		0.9		1.7										0	4.2
EQUIPMENT NONRECURRING																		0	0.0
ENGINEERING CHANGE ORDERS																		0	0.0
DATA																		0	0.0
TRAINING EQUIPMENT																		0	0.0
SUPPORT EQUIPMENT																		0	0.0
OTHER																		0	0.0
INTERIM CONTRACTOR SUPPORT																		0	0.0
INSTALLATION OF HARDWARE																			
FY96 EQUIPMENT																			
FY97 EQUIPMENT				4	1.3													4	1.3
FY98 EQUIPMENT						4	1.3											4	1.3
FY99 EQUIPMENT								AP	1.0	4	0.9							4	1.9
FY 00 EQUIPMENT										8	1.7							8	1.7
FY01 EQUIPMENT																		0	0.0
FY 02 EQUIPMENT																			0.0
FY03 EQUIPMENT																		0	0.0
TO COMPLETE																		0	0.0
TOTAL INSTALLATION COST				4	1.3	4	1.3	AP	1.0	12	2.6				0.0		0.0	20	6.2
TOTAL PROCUREMENT COST			0.8		0.8		0.9		1.7		0.0				0.0		0.0		4.2
TOTAL COST			0.8		2.1		2.2		2.7		2.6				0.0		0.0		10.4

METHOD OF IMPLEMENTATION: AIT | ADMINISTRATIVE LEADTIME: 9 MTHS | PRODUCTION LEADTIME: 12

CONTRACT DATE: | PRIOR YEAR: | CURRENT YEAR: | May-97 | BUDGET YEAR: FEB-98 | BUDGET YEAR 2: FEB 99

PRODUCTION DELIVER DATE: | PRIOR YEAR: | CURRENT YEAR: | May-98 | BUDGET YEAR: FEB-99 | BUDGET YEAR 2: FEB 00

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 PRIOR										
FY 1997			4							4
FY 1998				4						4
FY 1999						0 0 4 0				4
FY 2000						0 8 0 0				8
FY 2001										20
FY 2002										
FY 2003										

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996										
FY 1997				4						4
FY 1998					0 0 4 0					4
FY 1999							4			4
FY 2000							8			8
FY 2001										20
FY 2002										
FY 2003										

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: BALLAST/DEBALLAST (LHA MIDLIFE UPGRADE)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY	7				3														10	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.8				0.7													0	2.5
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR			7	1.4															7	1.4
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT								3	2.8										3	2.8
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST	0	0.0	7	1.4	0.0	0.0	3	2.8	0.0	0.0		0.0		0.0	0	0.0		0.0	10	4.2
TOTAL PROCUREMENT COST	0	1.8		0.0		0.7		0.0		0.0		0.0		0.0		0.0		0.0		2.5
TOTAL COST		1.8		1.4		0.7		2.8		0.0		0.0		0.0		0.0		0.0		6.7

METHOD OF IMPLEMENTATION: | COMPETITIVE | ADMINISTRATIVE LEADTIME: | 9 MONTHS | PRODUCTION LEADTIME: | 12

CONTRACT DATE: | PRIOR YEAR: | CURRENT YEAR: | BUDGET YEAR: May 98 | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: | CURRENT YEAR: | BUDGET YEAR: May 99 | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 & PRIOR		7								7
FY 1997										0
FY 1998				3						3
FY 1999										
FY 2000										10
FY 2001										
FY 2002										
FY 2003										
										20

OUTPUT ======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 & PRIOR		7								7
FY 1997										0
FY 1998					3					3
FY 1999										
FY 2000										
FY 2001										
FY 2002										
FY 2003										
										10

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CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: 300 TON A/C (LHA MIDLIFE UPGRADE)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY96												TO	TO		
	QTY PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	COMP QTY	COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																			
RDT&E																		0	0.0
PROCUREMENT																		0	0.0
QUANTITY		1		1		1		2										5	0.0
INSTALLATION KITS																		0	0.0
INSTALLATION KITS NONRECURRING																		0	0.0
EQUIPMENT			1.0		1.0		1.0		2.0									0	5.0
EQUIPMENT NONRECURRING																		0	0.0
ENGINEERING CHANGE ORDERS																		0	0.0
DATA																		0	0.0
TRAINING EQUIPMENT																		0	0.0
SUPPORT EQUIPMENT																		0	0.0
OTHER																		0	0.0
INTERIM CONTRACTOR SUPPORT																		0	0.0
INSTALLATION OF HARDWARE																			
FY96 EQUIPMENT																			
FY97 EQUIPMENT				1	5.1													1	5.1
FY98 EQUIPMENT						1	5.3											1	5.3
FY99 EQUIPMENT																		0	0.0
FY 00 EQUIPMENT								AP	2.0	1	4.4							1	6.4
FY01 EQUIPMENT										2.0	8.8							2	8.8
FY 02 EQUIPMENT																		0	0.0
FY03 EQUIPMENT																		0	0.0
TO COMPLETE																		0	0.0
TOTAL INSTALLATION COST			0.0	1	5.1	1	5.3	AP	2.0	3	13.2		0.0		0.0		0.0	5	25.6
TOTAL PROCUREMENT COST			1.0		1.0		1.0		2.0		0.0		0.0		0.0		0.0		5.0
TOTAL COST			1.0		6.1		6.3		4.0		13.2		0.0		0.0		0.0		30.6

METHOD OF IMPLEMENTATION: AIT | ADMINISTRATIVE LEADTIME: 9 MTHS | PRODUCTION LEADTIME: 12 MTHS

CONTRACT DATE: 2/97 | PRIOR YEAR: | CURRENT YEAR: Jul-97 | BUDGET YEAR: Feb-98 | BUDGET YEAR 2: Feb-99

PRODUCTION DELIVER DATE: 2/98 | PRIOR YEAR: | CURRENT YEAR: Jul-98 | BUDGET YEAR: Feb-99 | BUDGET YEAR 2: Feb-00

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR										
FY 1997			1							0
FY 1998				1						1
FY 1999						1				1
FY 2000						2				1
										2
										5

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR										
FY 1997										0
FY 1998				1						1
FY 1999					1					1
FY 2000						1				1
							2			2
										5

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: 363 TON AIR CONDITIONER

DESCRIPTION/JUSTIFICATION: The air conditioning plants provide cooling to the chilled water system which is a vital system supporting and the ships critical offensive, and defensive electronic systems. Lack of a continuous supply of chilled water to these vital systems has a serious effect on mission capability. The chilled water demand on aircraft carriers has grown as a result of installation of numerous electronic systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY	11		1		2		1												15	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT				1.4		1.3		3.2											0	5.9
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	2	17.3	1	7.3	2	13.9	3	24.2	3	19.7									11	82.4
FY97 EQUIPMENT											1	6.3							1	6.3
FY98 EQUIPMENT													2	6.8					2	6.8
FY99 EQUIPMENT															1	7.6			1	7.6
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.00
TOTAL INSTALLATION COST	2	17.3	2	7.3	2	13.9	3	24.2	3	19.7	1	6.3	1	6.8	1	7.6			15	103.1
TOTAL PROCUREMENT COST		0.0		1.4		1.3		3.2		0.0		0.0		0.0		0.0			0	5.9
TOTAL COST		17.3		8.7		15.2		27.4		19.7		6.3		6.8		7.6			15	109.0

METHOD OF IMPLEMENTATION: SHIPYD/COMP — ADMINISTRATIVE LEADTIME: 6 MOS — PRODUCTION LEADTIME: 24 MONTHS

CONTRACT DATE: 6/97 — PRIOR YEAR: Dec-93 — CURRENT YEAR: Aug-97 — BUDGET YEAR: Feb-98 — BUDGET YEAR 2: Feb-99

PRODUCTION DELIVER DATE: — PRIOR YEAR: Jun-95 — CURRENT YEAR: Aug-99 — BUDGET YEAR: Feb-00 — BUDGET YEAR 2: Feb-01

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	2	1	1 1	1 1 1	21					11
FY 1997						1				1
FY 1998							1			1
FY 1999								1	1	2
										15

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR		2 1	1		1 1	1				11
FY 1997						1 1				1
FY 1998							1			1
FY 1999								1	1	2
										15

* DECOMISSIONED SHIPS ASSETS — P-3A

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: REV OSMOSIS (LHA MIDLIFE UPGRADE)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY					4				16										20	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT						1.8				7.2									0	9.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR																				
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT					AP	0.6	4	1.3											4	1.9
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT									AP	1.7	16	3.3	*						16	5.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST		0.0		0.0	AP	0.6	4	1.3	AP	1.7		3.3	0	0.0	0	0.0	0	0	20	6.9
TOTAL PROCUREMENT COST				0.0		1.8		0.0		7.2		0.0		0.0		0.0		0.0		9.0
TOTAL COST		0.0		0.0		2.4		1.3		8.9		3.3		0.0		0.0		0.0		15.9

METHOD OF IMPLEMENTATION: AIT | ADMINISTRATIVE LEADTIME: 6 | PRODUCTION LEADTIME: 12

CONTRACT DATE: | PRIOR YEAR: | CURRENT YEAR: | BUDGET YEAR: May-98 | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: | CURRENT YEAR: | BUDGET YEAR: May-99 | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR										
FY 1997										
FY 1998				4						4
FY 1999										0
FY 2000						12 4				16
FY 2001										20
FY 2002										
FY 2003										

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR										
FY 1997										
FY 1998					4					4
FY 1999										0
FY 2000							4 8 0 4			16
FY 2001										20
FY 2002										
FY 2003										

40

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: CHT UPGRADE (LHA MIDLIFE UPGRADE)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY			3		3		3		6										15	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT				0.5		0.6		0.6		1.2									0	2.9
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT																				
FY97 EQUIPMENT					3	5.7													3	5.7
FY98 EQUIPMENT							3	6.0											3	6.0
FY99 EQUIPMENT									3	6.5									3	6.5
FY 00 EQUIPMENT											6	8.1							6	8.1
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST				0.0		5.7	3	6.0	3	6.5	6	8.1		0.0			0.0		15	26.3
TOTAL PROCUREMENT COST				0.5		0.6		0.6		1.2		0.0		0.0			0.0			2.9
TOTAL COST				0.5		6.3		6.6		7.7		8.1		0.0			0.0			29.2

METHOD OF IMPLEMENTATION: COMPETITIVE | ADMINISTRATIVE LEADTIME: 9 MONTHS | PRODUCTION LEADTIME: 12 | 12 MONTHS

CONTRACT DATE: | PRIOR YEAR: | CURRENT YEAR: Jul-97 | BUDGET YEAR: Feb-98 | BUDGET YEAR 2: Feb-99

PRODUCTION DELIVER DATE: | PRIOR YEAR: | CURRENT YEAR: Jul-98 | BUDGET YEAR: Feb-99 | BUDGET YEAR 2: Feb-00

INSTALLATION SCHEDULE:

INPUT =======>

	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 & PRIOR										
FY 1997			3							3
FY 1998				3						3
FY 1999					3					3
FY 2000						6				6
FY 2001										15
FY 2002										
FY 2003										

OUTPUT =====>

	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 & PRIOR										
FY 1997				3						3
FY 1998					0 0 3 0					3
FY 1999					0 3 0 0					3
FY 2000							6			6
FY 2001										15
FY 2002										
FY 2003										

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: COMMAND/CONTROL UPG (250 TON A/C)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY					6														6	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT						6.2													0.0	6.2
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
																			0	0.0
FY96 EQUIPMENT																			0	0.0
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT									3	10.4	3	11.6							6	22.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0	3	10.4	3	11.6		0.0		0.0		0.0			6	22.0
TOTAL PROCUREMENT COST		0.0		0.0		6.2		0.0		0.0		0.0		0.0		0.0			6	6.2
TOTAL COST		0.0		0.0		6.2		10.4		11.6		0.0		0.0		0.0				28.2

METHOD OF IMPLEMENTATION: AIT | ADMINISTRATIVE LEADTIME: 9 MTHS | PRODUCTION LEADTIME: 15 MONTHS

CONTRACT DATE: | PRIOR YEAR: | CURRENT YEAR: | BUDGET YEAR: MAR 98 | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: | CURRENT YEAR: | BUDGET YEAR: JUNE 99 | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
FY 1996 & PRIOR										
FY 1997										
FY 1998				3	3					6
FY 1999										
FY 2000										
FY 2001										
FY 2002										
FY 2002										

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
FY 1996 & PRIOR										
FY 1997										
FY 1998					3	3				6
FY 1999										
FY 2000										
FY 2001										
FY 2002										
FY 2002										

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: LANDING CRAFT AIR CUSHION (LCAC) (AIT)

DESCRIPTION/JUSTIFICATION: Funds in this line are for modificatons on the craft to enhance military capabilities directed by CNO or technical characteristics when warranted by reason of safety, reliability and/or cost effectiveness. Advanced technology used in LCAC demands constant and continual modifications to ensure proper mission performance and maintain craft configuration to those new craft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT	1000		564				164		227		149		774		837				3715	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		6.5		4.4		0.0		16.2		13.9		16.0		17.0		17.0				91.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR	1000	2.9																	1000	2.9
FY97 EQUIPMENT			282	1.9	282	3.5													564	5.4
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT							164	2.0											164	2.0
FY 00 EQUIPMENT									227	2.9									227	2.9
FY01 EQUIPMENT											149	1.9							149	1.9
FY02 EQUIPMENT													774.0	9.8					774	9.8
FY03 EQUIPMENT															837	10.7			837	10.7
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST	1000.0	2.9	282.0	1.9	282.0	3.5	164.0	2.0	227.0	2.9	149.0	1.9	774.0	9.8	837.0	10.7			3715	35.6
TOTAL PROCUREMENT COST		6.5		4.4				16.2		13.9		16.0		17.0		17.0				91.0
TOTAL COST		9.4		6.3		3.5		18.2		16.8		17.9		26.8		27.7				126.6

METHOD OF IMPLEMENTATION: AIT | ADMINISTRATIVE LEADTIME: | PRODUCTION LEADTIME:

CONTRACT DATE: | PRIOR YEAR: VARIOUS | CURRENT YEAR: VARIOUS | BUDGET YEAR: VARIOUS | BUDGET YEAR 2: VARIOUS

PRODUCTION DELIVER DATE: | PRIOR YEAR: VARIOUS | CURRENT YEAR: VARIOUS | BUDGET YEAR: VARIOUS | BUDGET YEAR 2: VARIOUS

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	1000									1000
FY 1997		282								282
FY 1998			282							282
FY 1999				164						164
FY 2000					227					227
FY 2001						149				149
FY 2002							774			774
FY 2003								837		837
TC										3715

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	1000									1000
FY 1997		282								282
FY 1998			282							282
FY 1999				164						164
FY 2000					227					227
FY 2001						149				149
FY 2002							774			774
FY 2003								837		837
										3715

Quantities are based on each Assault Craft Unit completing 30 per year, with various CRAFTALT being installed on various craft.

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: BOAT DAVITS

DESCRIPTION/JUSTIFICATION: The hydraulic system with single arm davits will be replaced wth new mehanical shock absorber and two speed winch.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	2																		2	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.5																	0	0.5
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																				0.5
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT	2	0.1																	2	0.1
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST	2	0.1	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	2	0.1
TOTAL PROCUREMENT COST	0	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0.0	0	0.5
TOTAL COST	0	0.6	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0		0.6

METHOD OF IMPLEMENTATION: AIT | ADMINISTRATIVE LEADTIME: | 9 MONTHS | PRODUCTION LEADTIME: 18 MONTHS

CONTRACT DATE: | PRIOR YEAR: Jun-90 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: Dec-91 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	1 1									2

OUTPUT ======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	1 1									2

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: HM&E SAFETY ALTS

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY	2																		2	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.8																	0	0.8
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT			AIT	2.1															2	2.1
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																				
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST	0	0.0	0	2.1	0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0			2	2.1
TOTAL PROCUREMENT COST	0	0.8		0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0.0	0	0.8
TOTAL COST		0.8		2.1	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0		0.0	0	2.9

METHOD OF IMPLEMENTATION: COMPETITIVE — ADMINISTRATIVE LEADTIME: 9 MONTHS — PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATE: — PRIOR YEAR: Mar-89 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

PRODUCTION DELIVER DATE: — PRIOR YEAR: Mar-90 — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR		2								2

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR			2							2

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: LPAC

DESCRIPTION/JUSTIFICATION: The replacement compressor is the Navy's standard low pressure air compressor. It is a design owned solely by the Navy. This replacement is the Navy's standard 200 SCFM, 125 PSI low pressure "STAR" air compressor. The units are programmed for installation in the DDG-51 Class, LSD-49 Class, and as a back fit in the AOE-1 Class. Each SHIPALT requires the installation of new low pressure air compressors to increase air capacity or improve reliability. Installation will be accomplished by an alteration S/A AOE-645.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT	1																		1	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		1.0																	0.0	1.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
																			0	0.0
FY96 & PRIOR EQUIPMENT	1	0.4																	1	0.4
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																				
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST	1	0.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0			1	0.4
TOTAL PROCUREMENT COST		1.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0			0	1.0
TOTAL COST		1.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0			0	1.4

METHOD OF IMPLEMENTATION: COMPETITIVE | ADMINISTRATIVE LEADTIME: 9 MTHS | PRODUCTION LEADTIME: 10 MTHS

CONTRACT DATE: | PRIOR YEAR: May-94 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: May-95 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	1									1

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR	1									1

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A — INDIVIDUAL MODIFICATION — FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: CARGO MONORAIL (LHA MIDLIFE UPGRADE)

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY96 PRIOR QTY	FY96 PRIOR	FY 97 QTY	FY 97	FY 98 QTY	FY 98	FY 99 QTY	FY 99	FY 00 QTY	FY 00	FY 01 QTY	FY 01	FY 02 QTY	FY 02	FY 03 QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
QUANTITY							1												1	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT								0.5											0	0.5
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT																			0	0.0
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT							1	0.7											1	0.7
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																			0	0.0
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST							1	0.7		0.0		0.0		0.0		0.0		0.0	1	0.7
TOTAL PROCUREMENT COST						0.0		0.5		0.0		0.0		0.0		0.0		0.0		0.5
TOTAL COST						0.0		1.2		0.0		0.0		0.0		0.0		0.0		1.2

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: 9 MTHS — PRODUCTION LEADTIME: 6 MONTHS

CONTRACT DATE: PRIOR YEAR: — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2: Oct-98

PRODUCTION DELIVER DATE: PRIOR YEAR: — CURRENT YEAR: — BUDGET YEAR: — BUDGET YEAR 2: Mar-99

INSTALLATION SCHEDULE:

INPUT =======>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 & PRIOR										
FY 1997										
FY 1998										
FY 1999				1						1
FY 2000										
FY 2001										
FY 2002										
FY 2003										
TC										

OUTPUT =====>	FY96 1, 2, 3, 4	FY97 1, 2, 3, 4	FY98 1, 2, 3, 4	FY99 1, 2, 3, 4	FY00 1, 2, 3, 4	FY01 1, 2, 3, 4	FY02 1, 2, 3, 4	FY03 1, 2, 3, 4	TC 1, 2, 3, 4	TOTAL
FY 1996 & PRIOR										
FY 1997										
FY 1998										
FY 1999					1					1
FY 2000										
FY 2001										
FY 2002										
FY 2003										
TC										

CLASSIFICATION: UNCLASSIFIED

P3A | INDIVIDUAL MODIFICATION | FEBRUARY 1997

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

MODELS OF SYSTEM AFFECTED: SALINITY INDICATORS

DESCRIPTION/JUSTIFICATION: Replacement of the salinity equipment on the SSB 688 Class with the new MIL S15103 is required to meet the SHIPALT schedule. Submarines have a need to monitor the quality of water which is required for operation of critical systems. The present systems are old and hard to support, and will not adequately support the new and upgraded electronic water requirements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
RDT&E																			0	0.0
PROCUREMENT	1																		1	0.0
QUANTITY																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT		0.5																	0	0.5
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR																			0	0.0
FY97 EQUIPMENT			1	0.4															1	0.4
FY98 EQUIPMENT																			0	0.0
FY99 EQUIPMENT																			0	0.0
FY 00 EQUIPMENT																			0	0.0
FY01 EQUIPMENT																			0	0.0
FY 02 EQUIPMENT																				
FY03 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST		0.0	1	0.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1	0.4
TOTAL PROCUREMENT COST		0.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.5
TOTAL COST		0.5		0.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.9

METHOD OF IMPLEMENTATION: AIT | ADMINISTRATIVE LEADTIME: 9 MOS | PRODUCTION LEADTIME: 12 MOS

CONTRACT DATE: | PRIOR YEAR: May-89 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

PRODUCTION DELIVER DATE: | PRIOR YEAR: May-90 | CURRENT YEAR: | BUDGET YEAR: | BUDGET YEAR 2:

INSTALLATION SCHEDULE:

INPUT =======>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR		1								1

OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY03	FY03	TC	
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL
FY 1996 & PRIOR		1								1

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA: 1 SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SURFACE IMA BLI#098300

	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$1.4	$2.4	$2.0	$0.1	$1.8	$5.1	$2.1	$2.2

THIS LINE ITEM IS COMPOSED OF TWO PROGRAMS:

A. Intermediate Maintenance Activity (IMA) (Ashore)
B. Support and Test Equipment Engineering Program (STEEP) - Program requirements (without funds) for FY98 and outyears are being transferred to the 3M Program (81G4) in accordance with OPNAV Sponsor direction.

Intermediate Maintenance Activity (IMA) Improvement Program:

The IMA Improvement Program funds are used to procure industrial plant equipment for activities which provide maintenance capabilities for sailors to maintain surface and sub-surface vessels of the U.S. Navy. These activities ashore include the following: Shore Intermediate Maintenance Activities (SIMA), Trident Refit Facilities (TRF), Regional Repair Centers, Subase Repair Activities, and Air Cushion Unit Facilities. With the reduction of numbers of tenders, the fleets have initiated Battle Force IMA (BFIMA) to increase self-sufficiency of the Battle Groups. Funds will be used to procure plant equipment to satisfy core capability requirements. The size and function of each facility and their work spaces are dictated by the specific ship classes and number of ships located at the homeport of the Battle Group.

Modern Industrial Plant Equipment (IPE), test equipment, and associated support equipment must be procured and installed or available for use in the work spaces. Procurement of this equipment is phased to coincide with military construction milestones. SIMAs are inspected periodically to determine the need for refurbishment or replacement of existing equipment. The SIMA modernization program provides the replacement of IPE based upon the inspections. The Immediate Need Items are procured for multiple IMAs to improve productivity and add new capabilities, and to maintain existing capabilities where machinery becomes uneconomical to repair. New equipments are procured to satisfy realignment of capabilities at IMAs.

BUDGET ITEM JUSTIFICATION SHEET (CONTINUATION) (EXHIBIT P-40 cont)	DATE February 1997
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-1 Ships Support Equipment	P-1 ITEM NOMENCLATURE P-1 Item: Surface IMA

STEEP

Program requirements (without funds) for FY98 and outyears are being transferred to the 3M Program (81G4) in accordance with OPNAV Sponsor direction.

The STEEP Program provides support and test equipment for intermediate Maintenance activities and aboard most combatants. Funding of this program to requirement levels results in lower maintenance costs and enables readiness of respective electronic equipment to be maintained. Deploying automatic test (ATE) and diagnostic equipment, and their respective Test Program Sets and Gold Disks allows shipboard personnel to test and diagnose circuit card assemblies at the site of the operational failure. The STEEP and 2M Program (2M/ATE) together provide a complete electronics subassembly field level maintenance program, avoiding Fleet OPTAR costs and averting CASREPs. For FY 96 and FY 97, funding will be used to procure and deploy non-aviation Test Program Sets (TPSs) and Gold Disks.

PROGRAM COST BREAKDOWN P-5	A. DATE February 1997
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-1 Ships Support Equipment	C. P-1 ITEM NOMENCLATURE Surface IMA/81K6

ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
(1)	(2)	(3)	(6)	(7)	(8)		(9)		(9)
LOGISTICS N4									
K6100 TRF BANGOR			0		100		0		0
K6100 TRF KINGS BAY			0		100		0		0
K6100 EVERETT			0		0		0		0
K6100 NORFOLK			270		970		0		0
K6100 IMMEDIATE NEED ITEMS			336		612		2026		57
K6010 SUPPORT & TEST EQUIP ENGINEERING PROGRAM(STEEP)									
ANALOG/DIGITAL TPS/GOLD DISK			156		331		0		0
HAWC(AN/USM-465) UPGRADE			313		274				
TAT TPS CONVERSION TO CASS			310		0		0		0
TOTAL SURFACE IMA			1385		2387		2026		57

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA: 1 SHIPS SUPPORT EQUIPMENT**	**P-1 ITEM NOMENCLATURE** **Radiological Controls 81GZ**

	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$ 0.1	$ 0.2	$ 0.2	$ 0.3	$ 0.2	$ 0.2	$ 0.2	$ 0.2

The Radiological Affairs Support Office (NAVSEADET RASO), a Detachment of SEA 07R, supports Navy Industrial Radiological Controls Programs, provides radiological analyses of environmental samples for Navy radiation protection programs and accident/incident response, as well as providing personnel and equipment for the Navy RADCON team for response to a nuclear weapons accident/incident or similar radiological event. Additionally, NAVSEADET RASO trains all Navy and USMC Industrial Radiation Safety Officers through the conduct of formal official courses taught at the detachment. In support of their stated responsibilities, NAVSEADET RASO is required to maintain state-of-the-art field and mobile radiation detection, identification, and measurement equipment for both fixed site and remote emergency response operations. The associated instrumentation is used extensively for routine work and instructional purposes, yet must be ready for rapid deployment in case of emergencies. As a result, there is a continuing need to insure adequate redundancy of instruments to prevent a degradation or loss of capability in any area, to further support procurement of technologically advanced instrumentation, and to ensure that a fully equipped and air transportable Navy RADCON team is available for rapid deployment.

NAVSEA provides all Navy funding to support the National Council on Radiation Protection and Measurements (NCRP). NCRP is a Congressionally chartered organization which collects, analyzes and disseminates, in the public interest, information and recommendations about radiation protection and measurements. NCRP recommendations for national human radiation exposure limits, environmental release/cleanup standards, and pathway analyses for human radiation exposures are used by federal and state regulatory agencies to define their standards for compliance. Recommendations of the NCRP have major legal and Congressional influence during consideration of new federal radiation protection statutes. Navy's support to NCRP ensures prompt and real-time awareness of areas of interest that impact programs which include Naval Reactors, nuclear medicine at Navy hospitals and clinics, Navy nuclear weapons programs, Navy research; and industrial operations, including shipyards.

FY 96 funding and beyond provides resources to ensure Navy's goals of reducing personnel exposure to ionizing radiation to levels as low as reasonably achievable (ALARA) as well as protecting the general public and the environment from radiation exposure caused by previous Navy operations are met. Recent decisions by Base Closure and Realignment Commissions have resulted in increasing numbers of Navy shore activities being decommissioned with plans to transfer ownership to local civilian entities with no restrictions on their future use. Prior to release of these facilities which include former Naval shipyards, Naval air Stations, and ammunition depots; extensive radiological surveys of the sites are conducted to ensure that no residual radioactivity caused by prior Navy operations remains. Anomalies discovered during these surveys often require NAVSEADET RASO personnel to bring portable state-of-the-art radiation instruments to the sites to adequately characterize the nature of apparent zones of elevated (higher than naturally occurring background) radiation. As technological improvements in radiation instrumentation progress the capability of NAVSEADET RASO personnel instruments must be upgraded to expeditiously and adequately resolve concerns raised by these anomalous findings.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA: 1 SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE MINI/MICROMINIATURE ELECTRONIC TEST AND REPAIR BLI: 098800 81G4			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$1.0	$0.9	$0.5	$0.5	$0.5	$0.5	$0.6	$0.6

NOTE: During PR-98, the Sponsor N431 deleted the Support and Test Equipment Engineering Program (STEEP) funding and resourced it in FY 98 and out to Surface IMA (Ashore) and recommendated that all STEEP requirements be identified here in the 2M repair program. Funding for STEEP is not being transferred to the 2M repair program, but will remain in the Surface IMA Program (81K6) for IMA MILCON projects and IMA upgrades .

1. The Navy 2M Program provides sailors with the capability to repair electronic circuit card assemblies (CCAs) and electronic modules (EMs) at Intermediate Maintenance Activities and aboard most combatants. Funding to requirement levels will enable Navy cost avoidance annually by Fleet maintenance levels executing CCA repairs in lieu of more expensive depot sites. The services provided by 2M allow new repair tools to be selected, deployed, and supported in the Fleet in time to support new CCA technologies. 2. The STEEP Program provides support and test equipment for intermediate Maintenance activities and aboard most combatants. Funding of this program to requirement levels results in lower maintenance costs and enables readiness of respective electronic equipment to be maintained. Deploying automatic test (ATE) and diagnostic equipment, and their respective Test Program Sets and Gold Disks allows shipboard personnel to test and diagnose circuit card assemblies at the site of the operational failure. The STEEP and 2M Program (2M/ATE) together provide a complete electronics subassembly field level maintenance program, avoiding Fleet OPTAR costs and averting CASREPs. For FY 96 and outyears, funding will be used to procure and deploy non-aviation Test Program Sets (TPSs) and Gold Disks. Outyear funding will be used to procure and deploy commercial equipment to test and diagnose new electronic technologies being introduced into the Fleet. The STEEP and 2M Programs (2M/ATE) together provide a complete electronics subassembly field level maintenance program, avoiding OPTAR costs and averting CASREPs due to long (up to 120 day) logistics delays. Due to changing technologies, CCAs currently in the Fleet range in price from $500 to $40K each. Currently deployed repair tools, equipment and repair processes will not support repair of CCAs containing advanced technologies such as surface mount and leadless ship carrier. This technology is now becoming prevalent in commercial and military equipment.

CLASSIFIED SUBMIT

ITEM NO.	PAGE NO.
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CLASSIFIED SUBMIT

ITEM NO.	PAGE NO.
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BUDGET ITEM JUSTIFICATION SHEET							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OP,N BA 1: Ships Support Equipment					P-1 ITEM NOMENCLATURE (81HY) Diving and Salvage Equipment (BLI 1130)			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	$ 7.8	$ 8.5	$ 4.9	$ 5.6	$ 5.5	$ 5.7	$ 5.8	$ 5.9

DIVING - (N873)
This request provides funding for procurement of modern equipment to replace the Navy's archaic diving systems. The demand for divers' services for salvage, ship husbandry, repair and sanitizing work is rapidly increasing. The requested funding buys diving hardware which increases the efficiency and safety of the working diver. Program objectives are to: (1) provide increased safety for diver decompression and better recompression chamber patient monitoring capability, (2) increase underwater ship maintenance capabilities, (3) improve quick response capability, and (4) standardize the configuration of diving systems in the Fleet. The major items of procurement are:

HY106 Lightweight Dive System (LWDS):
a. This system is completely self-contained, man-portable, and can be deployed from dockside or a ship of opportunity. The system will support two working divers and a standby diver to 60 feet of seawater (FSW) for up to a six hour mission performing ship husbandry, light salvage, and underwater inspection tasks. The LWDS consists of four subsystems; Diver Life Support System (DLSS), Diver Equipment, a Spare Parts Kit, and 5000 PSI Flask Replacements (see below for contents of subsystems). The Diver Equipment will interface with all Navy certified, air surface supplied diving systems. Required I/O is 40.

DLSS:
1. Compressor Package - Compressor and prime mover mounted on a common frame; with external fuel tank and gauges.
2. Composite Flasks - Racks of composite HP cylinders; with manifolds and interconnecting hoses.
3. Volume Tank - Assembly mounted on separate frame; with interconnecting hoses.
4. Control Console - Suitcase size with air supply and pneumofathometer control.

Diver Equipment:
1. Full Facemask (FFM) - Lightweight, low volume FFM with communications that interface with fielded communications sets. Each set includes 3 FFMs.
2. Harness Assembly - Diver harness with manifold block. Each set includes three Harness Assemblies.

5000 PSI Flask Replacement:
This item replaces the composite flasks used in the LWDS which have reached their 15 year service life.

BUDGET ITEM JUSTIFICATION SHEET (Con't)	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY: OP,N BA 1: Ships Support Equipment	P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment (BLI 1130)

HY107 Portable Recompression Chamber:
a. Portable Chamber: The Paracel Transportable Recompression Chamber System provides an effective two-man evacuation, transport, treatment, and transfer under pressure capability in order to benefit a diver suffering a pressure related ailment requiring urgent hyperbaric treatment. This is the lightest, most transportable system available to the U. S. Navy. Required I/O is 16.
b. Engineering Change Proposals
c. This item modified existing systems with an environmental system to allow operation in both hot and cold extreme temperature environments. I/O is 16.

HY123 Flyaway Dive System (FADS) III: The FADS III is a matrix of components designed to support a manned diving to 300 fsw. It is made up of two major subsystems, the High Pressure (H.P.) Air System and the Mixed Gas System. The air system consists of a 5000 psi air rack using lightweight composite flasks, a portable diver's air console, and a 5000 psi air compressor packaged for flyaway applications. The mixed gas subsystem consists of H.P racks for containment of various gas mixes required for diving operations, a mixed gas diving console, and a gas transfer mixmaker system for charging mixed gas flasks. The matrix concept is designed to provide maximum flexibility in assembling equipment necessary to support a dive mission. Required I/O's are 20 High Pressure Air Systems and 4 Mixed Gas Systems.

HY132 Standard Recompression Chamber: The Standard Recompression Chamber is a standardized, conventional full-size chamber designed to be built using standard commercial specifications and standards. The chamber is capable of providing a full range of recompression treatment to two patients and two attendants. It will replace aging and difficult to maintain recompression chambers that will be retired due to fatigue and material flaws. Required I/O is 21 standard chambers and 1 chamber without gas storage.

HY176 Oil Free Compressors: This item replaces high pressure Air Compressors in existing diver's life support systems which have reached the end of their service life. Required I/O is 64.

HY177 Air Purification Units: This item is used when charging diver's life support system (DLSS) flasks or inserted inline in the DLSS to purify and monitor diver's breathing air. It will enhance diver's safety by providing constant monitoring of diver's breathing air and eliminate the need for the semi-annual air samples of all diver's breathing air compressors. Required I/O is 500 units.

BUDGET ITEM JUSTIFICATION SHEET (Con't)	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY: OP,N BA 1: Ships Support Equipment	P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment (BLI 1130)

SALVAGE: (N869)

This request provides program support for the procurement of critical salvage and underwater ship repair items. Public Law 513 (80th Congress, 10 USC 7361 ET SEQ) authorizes the Secretary of the Navy to provide, by contractor or otherwise, necessary salvage and diving equipment, services and facilities for public, private, and military vessels upon such terms and conditions as he may, in his discretion, determine to be in the best interest of the United States.

The U. S. Navy Supervisor of Salvage maintains the Emergency Ship Salvage Material (ESSM) System which consists of a network of bases which maintain, control, and issue material for salvage operations, underwater ship husbandry operations, pollution abatement operations, ocean engineering projects, special authorized projects, and equipment for use in national emergencies. The major bases are located in Williamsburg, Virginia; Stockton, California; Singapore; and Livorno, Italy. Satellite bases having smaller allowances are maintained at Aberdeen, Scotland; Sasebo, Japan; Pearl Harbor, Hawaii; and Bahrain. This system provides the Nation's first line of defense for major pollution abatement operations and the Navy's second line of defense for salvage operations. The equipments to be procured are:

HY050 Synthetic Line: This line is used for lifting, mooring, towing, rigging, and in conjunction with the remotely operated vehicles at the salvage site. Sufficient quantities do not exist in the ESSM system for adequate operational support. Required I/O is 200.

HY062 ORION/D2/CURV Sonar System: These sonars are used on the ORION, DEEP DRONE, and CURV III remotely operated vehicles to locate items in a debris field, locate hull sections, and avoid obstacles. The sonar functions as the eyes of the vehicle. Total I/O is 12 (10 operational plus 2 spares).

HY116 Portable Submersible Pumps: The 6" hydraulic submersible salvage pump is designed for high lift with high discharge pressure. The pumping system is packaged in several containers for ease of shipment and handling at the casualty site. The pump with attached hoses, can be lowered into flooded spaces through 12-1/2" or larger accesses, or can be handcarried into confined spaces. It is hydraulically driven by the standard ESSM Model hydraulic power unit. Required I/O is 66.

HY131 ROV Handling Systems: These systems are used to launch and recover remotely operated vehicles from ships of opportunity. Additionally, they are used to tend the deployed cable, compensate for ship motion, monitor cable tension, and store cable. Required I/O is 10 (5 operational and 5 spares).

BUDGET ITEM JUSTIFICATION SHEET (Con't)	DATE: FEBRUARY 1997
OP,N BA 1: Ships Support Equipment	P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment (BLI 1130)

HY134 Lift Line Spooler: Lift Line Spoolers are used to deploy lift lines in deep ocean salvage operations. They are designed for use by the CURV III and DEEP DRONE ROVs. Required I/O is 6 (4 operational plus 2 spares).

HY135 U/W Ship Husbandry ROV: This is the first Remotely Operated Vehicle to be used to perform underwater ship husbandry tasks such as pre-cleaning, post-cleaning, paint condition assessment, and hull damage inspections. These vehicles will reduce the requirement for manned diving to conduct inspection work. Required I/O is 8.

HY136 30 KIP FADOSS: The 30 KIP FADOSS is used to salvage objects from deep water. The primary function is to reduce the dynamic loads that are encountered due to ship motion. These systems will handle recovery of equipment up to a weight of 30,000 pounds. Required I/O 4.

HY137 Electrical Protection Monitor: These systems will be used with underwater electric equipment to protect divers from electric shock hazards in the event a cable is cut or equipment is grounded. Required I/O is 16.

HY138 Salvage Air Van: The Salvage Air Van is equipped to support salvage operations requiring large quantities of compressed air for restoration of lost buoyancy. Required I/O is 4.

HY139 Digital Enhanced TV: This TV system greatly improves the resolution and therefore the utility of underwater inspections recorded in turbid waters. Because underwater visibility in all USN ports is poor, enhancing images is necessary to provide inspection results which can be accurately analyzed by topside maintenance engineers. Required I/O is 19.

HY140 ROV Control Package: The ROV Control Package is used to control the various functions of the CURV III, DEEP DRONE, and ORION ROVs. Required I/O is 6 (3 operational plus 3 spares).

HY141 U/W Ship Husbandry Inspection System: This hardware will permit rapid transmission of underwater inspection results to topside engineers for damage assessment. It will preclude the necessity of recording and forwarding video tapes for subsequent evaluation and allow engineers to direct inspections from remote sites. Required I/O is 5.

HY142 Salvage Air Compressor: Salvage Air Compressors are utilized to provide large quantities of compressed air for restoration of lost buoyancy. Required I/O is 10.

BUDGET ITEM JUSTIFICATION SHEET (Con't)	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY: OP,N BA 1: Ships Support Equipment	P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment (BLI 1130)

HY143 Salvage Air Hose System: Salvage Air Hose systems are utilized in conjunction with the salvage air compressor to provide large quantities of compressed air for restoration of lost buoyancy. Required I/O is 10.

HY145 Cofferdam System: This system will contain a variety of cofferdams necessary to accomplish underwater repair tasks to hull plating, shafts, stern tubes and sea chests on several ship classes. The cofferdams are engineered structural habitats which provide a safe underwater dry environment for divers to work and require very little maintenance. Required I/O is 10.

HY146 Prop Grooming Kit: These kits will contain the tools necessary to repair minor propeller damage underwater. By accomplishing these repairs in-place, propeller removal and replacement can be avoided thereby saving maintenance funds and returning ships to service faster. Required I/O is 5.

HY147 ROV Telemetry System: The ROV Telemetry System is the communication link between the surface controller and the vehicle. Required I/O is 6 (3 operational plus 3 spares).

HY151 Closed Cycle Hull Cleaning System: This equipment will eliminate discharge of hull cleaning by-products into harbors. Current cleaning equipment cannot recover any of the discharge. This equipment will be required for environmental compliance. Required I/O is 5.

HY153 Tensiometer Systems: Tensiometers are used to measure the tension exerted on a beach gear ground leg or heavy lift system. Typically used in pairs, one system consists of two 200,000 pound capacity load sensing units with associated rigging and read-out meters. Required I/O is 18.

HY154 Water Purifiers: Water Purifiers are capable of converting salty, brackish, or biologically polluted water into potable water. The systems are fully marinized for use aboard a ship of opportunity, and are complete with all necessary power sources, hoses, chemicals, and associated support equipment. Required I/O is 12.

HY155 15 KW Generators: These generators are used to fill the power gap between the existing 5 KW and 30 KW generators. They are used aboard a ship and shore-side to provide general purpose electrical power during salvage and debeaching operations. The generators are a system consisting of a diesel powered, portable generating unit, a power distribution panel, and associated distribution apparatus. Required I/O is 25.

HY156 Salvage Vans: These vans are modified ISO 8 ft x 8 ft x 20 ft shipping containers equipped to store and ship portable salvage equipment to a vessel of opportunity in times of National emergency. Each van is complete with a humidity controlling device for prolonging equipment life during storage. The system includes all necessary rigging and handling equipment. Required I/O is 25.

BUDGET ITEM JUSTIFICATION SHEET (Con't)	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY: OP,N BA 1: Ships Support Equipment	P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment (BLI 1130)

HY158 ROV Propulsion Systems: ROV propulsion systems provide main propulsion and control of remotely operated vehicles. These consist of electric and hydraulic thruster motors, thrusters, controllers, and interconnect cabling and power supplies. Required I/O is 8.

HY159 Sonar Dome Repair Kits: Provides special underwater tools necessary to repair rubber and glass reinforced plastic (GRP) sonar domes. Repairs include both non-structural (correcting self-noise problems) operations and structural (correcting ruptured or cracked domes) operations. Kits also contain tools necessary to remove and replace dome in the event repair is not possible. I/O is 4.

HY160 Underwater Ship Husbandry Gas Free Equipment: Kits provide environmental monitoring equipment to provide diving supervisors with real time data on air quality within a confined space such as a cofferdam or ballast tank. Monitoring the air allows divers to remove their helmets once inside the area and thereby increase productivity and reduce fatigue. I/O is 16.

HY161 Underwater Shaft Repair Kit: Provides tools necessary to repair and replace propulsion shafts underwater thereby eliminating the requirement for dry-docking. Required I/O is 3.

HY162 Trash Pump System: The Trash Pump System consists of two each, portable, hydraulically driven, submersible pumps, complete with all necessary hydraulic and product delivery hoses. The pumps are capable of passing solid objects without damage to the system. Required I/O is 25.

HY163 Towing Load Cells: Towing load cells are systems designed to monitor towline tensions during open ocean towing evolutions. They include tension measuring devices, telemetry systems, power supplies and all software and hardware required to maintain and operate them. Required I/O is 25.

HY164 Flyaway FADOSS System: This system consists of lightweight motion compensators, winches, rigging jewelry, and lines for lifting heavy objects off the sea floor. All of the components are designed to be flown to the salvage site and loaded aboard ships of opportunity. Required I/O is 8.

HY165 Underwater Welding Machines: Improved welding machines necessary to permit permanent underwater weld repairs to ship and submarine hull structure. Machines incorporated new technology to stabilize arc voltage and reduce equipment maintenance. I/O is 12.

BUDGET ITEM JUSTIFICATION SHEET (Con't)	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY: OP,N BA 1: Ships Support Equipment	P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment (BLI 1130)

HY166 ROV Tool Package: This tool package is utilized by remotely operated vehicles to accomplish work on objects on the sea floor and in the water column. These systems consist of dual manipulators, control systems, video inspection systems, range measuring systems, power supplies, hydraulic power units, an ancillary end effectors. I/O is 8.

HY167 Flyaway Weld Van: This van is a portable workstation outfitted to support underwater welding operations. It is designed to be self-supporting at remote worksites and is sized to allow for air transportation in a majority of commercial aircraft. This transportation scheme is necessary to support worldwide emergent repair operations cost effectively. I/O is 3.

HY168 SHT Replacement Kits: Submarine Special Hull Treatment Tiles sustain damage below the waterline which cannot currently be repaired without drydocking. Kits will provide tools to remove damaged tiles, prepare the steel hull surface and replace tiles. In-water repairs will be equivalent to drydock repairs. I/O is 5.

HY169 UWSH Power Tools: These tools will replace the hydraulic tool sets designed and issued to Fleet divers in the 1970's with improved technology. This technology improvement will provide tools which are more environmentally compatible, offer greater power, lighter weight and reduced maintenance. I/O is 15.

HY170 LWT Hydraulic Power Unit (HPU): These units will provide hydraulic power to operate underwater diver tools such as impact wrenches, drills, and hull cleaning brushes. The HPU's are lightweight and portable to support mobile diving teams performing underwater ship husbandry repair tasks. Required I/O is 15.

HY171 Salvage Foam System: This system generates cast-in-place urethane foam to provide buoyancy necessary to reduce ground reaction in stranded vessels. The system consists of foam producing chemicals; blowing agents; chemical/blowing agent packaging, handling, storage, and transportation equipment; diver held foam mixing and application nozzle, chemical metering/delivery equipment, and necessary ancillary equipment. I/O is 6 systems.

HY172 Lightweight Beach Gear: Lightweight Beach Gear is a lightweight and highly portable system for exerting a retraction force on stranded vessels. The system shall include a ground leg consisting of anchors, stoppers, and interconnection lines; a purchase subsystem consisting of a block and tackle set, turning blocks, and purchase line; a modular winch; and all necessary interconnecting lines and fittings. Total I/O is 24.

HY173 Digital Still Cameras: Underwater still cameras for divers use during hull damage inspections. Digital cameras will enable divers to quickly view images to ensure they are correct before suspending diving operations. Repair activities will then be given images which can be forwarded electronically for review by cognizant technical authorities. I/O is 20.

BUDGET ITEM JUSTIFICATION SHEET (Con't)	**DATE:** FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OP,N BA 1: Ships Support Equipment	**P-1 ITEM NOMENCLATURE** Diving and Salvage Equipment (BLI 1130)

HY174 Wastersleeve Inspection Systems: A non-destructive, non-intrusive inspection system which is inserted into a sea chest to measure and record the wastersleeve material condition. This inspection information is used to support condition based maintenance decisions regarding the necessity to replace worn, deteriorated or damaged wastersleeves. Total I/O required is 8.

HY175 Closed Cycle Blasting: System grit blasts underwater hull surfaces in preparation for underwater painting. Blast equipment uses standard commercial abrasives and collects grit and paint to comply with environmental standards. Grit blast surface preparation is necessary to obtain adequate adhesion of underwater applied paints used to arrest corrosion. I/O is 6.

81HY1 The project unit was used to pay current year funds for cancelled account vouchers. The money went into subhead 87PY.

	96	97	98	99	00	01	02	03
Reserve	$235	$290	$235	$268	$113	$125	$126	$131

DIVING AND SALVAGE RESERVE EQUIPMENT - (N869)
In accordance with the Surface Warfare Plan of 26 July 1986 as amplified by CNO ltr 37/7U388746 of 29 Jun 1987, we are restructuring our Naval Reserve Procurement Plan to include outfitting with updated systems fully compatible with those used by the active forces. Dive system compatibility is imperative to ensure safety and readiness. The equipments to be procured are:

HY105 Lightweight Dive System (LWDS): This system is completely self-contained, man-portable, and can be deployed from dockside or a ship of opportunity. The system will support two working divers and a standby diver to 60 feet of seawater (fsw) for a six hour mission performing ship husbandry, light salvage, and underwater inspection tasks. The LWDS consists of two subsystems; Diver Life Support System (DLSS) and Diver Equipment (see below for contents of subsystems). Required I/O is 14.

DLSS:
1. Compressor Package - Compressor and prime mover mounted on a common frame; with external fuel tank and gauges.
2. Composite Flasks - Racks of composite HP cylinders; with manifolds and interconnecting hoses.
3. Volume Tank - Assembly mounted on separate frame; with interconnecting hoses.
4. Control Console - Suitcase size with air supply and pneumofathometer control.

BUDGET ITEM JUSTIFICATION SHEET (Con't)	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY: OP,N BA 1: Ships Support Equipment	P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment (BLI 1130)

Diver Equipment:
1. Full Facemask - Lightweight, low volume FFM with communications that interface with fielded communication sets. Each set includes three FFMs.
2. Harness Assembly - Diver harness with manifold block. Each set includes three Harness Assemblies.

HY178 H.P. Air Compressors: This item provides reserve commands with indigenous H.P. air compressors for use with their Lightweight Dive Systems procured in HY105. Required I/O is 14.

EQUIPMENT INSTALLATION (FMP) - (N869)
Funding is for the installation of equipment including Fleet Modernization Program installation, installation of training equipment, and installation of equipment in other shore activities.

WEAPON SYSTEM COST ANALYSIS
EXHIBIT (P-5)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
OP,N BA 1: Ships Support Equipment

P-1 ITEM NOMENCLATURE/SUBHEAD
Diving and Salvage Equipment

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	DIVING EQUIPMENT - (N873)									
HY106	Lightweight Dive System									
	a. System	A	3	$462						
	b. 5000 PSI Flask Replacement	A								
	c. Engineering Change Proposals	A		$58						
HY107	Portable Recompression Chamber									
	a. Portable Chamber	A			3	$1,069				
	b. Engineering Change Proposals	A				$143				
	c. Environmental Upgrade Package	A								
HY123	Flyaway Dive System III									
	a. High Pressure Air System	A	2	$309			3	$656	3	$663
	b. Engineering Change Proposals	A		$604						
	c. Mixed Gas System	A								
HY132	Standard Recompression Chamber									
	a. Standard Chamber	A	1	$238	2	$572	2	$561	5	$1,486
	b. Chmbr w/o Gas Storage/Comp	A			1	$144				
	SUBTOTAL:			**$1,671**		**$1,928**		**$1,217**		**$2,149**
	SALVAGE EQUIPMENT - (N869)									
HY050	Synthetic Line	A					8	$379		
HY062	ORION/D2/CURV Sonar System	A							2	$503
HY131	ROV Handling System	A	1	$319	1	$1,174			1	$592
HY134	Lift Line Spooler	A	1	$134						
HY135	U/W Ship Husbandry ROV	A							2	$1,069
HY136	30 KIP FADOSS	A	2	$760						
HY137	Electrical Protection Monitor	A	8	$219						
HY138	Salvage Air Van	A	2	$55						
HY139	Digital Enhanced TV	A	16	$1,490						
HY140	ROV Control Package	A			1	$802				
HY141	U/W Ship Husbandry Inspection System	A			5	$523				

WEAPON SYSTEM COST ANALYSIS
EXHIBIT (P-5)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
BA 1: Ships Support Equipment

P-1 ITEM NOMENCLATURE/SUBHEAD
Diving and Salvage Equipment

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
HY142	Salvage Air Compressor	A			5	$1,192				
HY143	Salvage Air Hose System	A			3	$875				
HY145	Cofferdam System	A					9	$448		
HY146	Propeller Grooming Kit	A					5	$447		
HY147	ROV Telemetry System	A					1	$914		
HY151	Closed Cycle Hull Cleaning System	A	2	$934					2	$969
HY167	Flyaway Weld Van	A					2	$464		
HY170	LWT Hydraulic Power Unit	A	15	$580						
81HY1	Reprogrammed for Cancelled Vouchers	A		$215						
	SUBTOTAL:			**$4,706**		**$4,566**		**$2,652**		**$3,133**
	RESERVE EQUIPMENT - (N869)									
HY105	Lightweight Dive System	A	2	$235						
HY178	H.P. Air Compressors	A			4	$290	3	$235	3	$268
	SUBTOTAL:			**$235**		**$290**		**$235**		**$268**
	EQUIPMENT INSTALLATION (FMP) - (N869)									
HYINS	Installation/Alteration (FMP)	A		$1,221		$1,700		$756		
	SUBTOTAL:			**$1,221**		**$1,700**		**$756**		**$0**
	GRAND TOTAL:			**$7,833**		**$8,484**		**$4,860**		**$5,550**

BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OP, N BA 1: Ships Support Equipment

P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment

SUBHEAD: 81HY

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
DIVING EQUIPMENT - (N873)											
HY106	Lightweight Dive System										
	a. System										
	FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	04/96	04/97	3	$154	YES	NO	
	b. Engineering Change Proposals										
	FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	04/96	N/A	N/A	$58	YES	NO	
HY107	Portable Recomp Chamber										
	a. Portable Chamber										
	FY 1997	UNKNOWN	C/FP	NAVSEA	03/97	02/98	3	$356.3	YES	NO	
	b. Engineering Change Proposals										
	FY 1997	UNKNOWN	C/FP	NAVSEA	08/97	N/A	N/A	$143	YES	NO	
HY123	Flyaway Dive System III										
	a. H.P. Air System										
	FY 1996	GPC Norfolk, VA	C/FP	NAVSEA	02/96	03/97	2	$154.5	YES	NO	
	FY 1998	UNKNOWN	C/FP	NAVSEA	03/98	03/99	3	$218.7	YES	NO	
	FY 1999	UNKNOWN	C/FP	NAVSEA	03/99	03/00	3	$221	YES	NO	
	b. Engineering Change Proposals										
	FY 1996	GPC Norfolk, VA	C/FP	NAVSEA	02/96	N/A	N/A	$604	YES	NO	

REMARKS

HY123 FADS III H.P. Air System unit cost variations depend on whether we are procuring a full FADS III or the receiving command may already have a MK3 MOD 0 LWDS which we can upgrade for 5000 psi service and only have to procure the H.P. Gas Racks.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OP, N BA 1: Ships Support Equipment

P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment

SUBHEAD: 81HY

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HY132	Standard Recomp. Chamber										
	a. Standard Chamber										
	FY 1996	GPC Norfolk, VA	C/FP	NAVSEA	04/96	06/97	1	$238	NO	NO	
	FY 1997	UNKNOWN	C/FP	NAVSEA	04/97	06/98	2	$286	NO	NO	
	FY 1998	UNKNOWN	C/FP	NAVSEA	04/98	06/99	2	$280.5	NO	NO	
	FY 1999	UNKNOWN	C/FP	NAVSEA	04/99	06/00	5	$297.2	NO	NO	
	b. Chamber w/o Gas Storage/Compressor										
	FY 1997	UNKNOWN	C/FP	NAVSEA	04/97	08/98	1	$144	NO	NO	
SALVAGE EQUIPMENT - (N869)											
HY050	Synthetic Line										
	FY 1998	UNKNOWN	C/CPAF	NAVSEA	03/98	08/99	8	$47.4	YES	N0	
HY062	ORION/D2/CURV Sonar System										
	FY 1999	UNKNOWN	C/CPAF	NAVSEA	03/99	08/00	2	$251.5	YES	NO	

REMARKS

HY132: In FY97, procuring two complete chamber systems and one chamber without gas storage and compressors. The unit cost variations depend on the existing configuration and whether we need to procure compressors, gas banks, etc. with the chamber or whether the existing support equipment is in acceptable condition and we just need to procure the chamber.

BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP, N BA 1: Ships Support Equipment	Diving and Salvage Equipment	81HY

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HY131	ROV Handling System										
	FY 1996	Oceaneering Upper Marlboro, MD	C/CPAF	NAVSEA	09/96	09/97	1	$319	YES	NO	
	FY 1997	UNKNOWN	C/CPAF	NAVSEA	08/97	02/99	1	$1,174	YES	NO	
	FY 1999	UNKNOWN	C/CPAF	NAVSEA	03/99	09/00	1	$592	YES	NO	
HY134	Lift Line Spooler										
	FY 1996	Oceaneering Upper Marlboro, MD	C/CPAF	NAVSEA	02/96	10/96	1	$134	YES	NO	
HY135	U/W Ship Husbandry ROV										
	FY 1999	UNKNOWN	C/CPAF	NAVSEA	02/99	08/99	2	$534.5	YES	NO	
HY136	30 KIP FADOSS										
	FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	04/96	12/96	2	$380	YES	NO	
HY137	Electrical Protection Monitor										
	FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	04/96	07/96	8	$27.4	YES	NO	
HY138	Salvage Air Van										
	FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	04/96	12/96	2	$27.5	YES	NO	

REMARKS

HY131: Unit costs differ because cable capacity and load capacity differs between each system.

BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OP, N BA 1: Ships Support Equipment

P-1 ITEM NOMENCLATURE: Diving and Salvage Equipment

SUBHEAD: 81HY

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HY139	Digital Enhanced TV FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	04/96	08/96	16	$93.1	YES	NO	
HY140	ROV Control Package FY 1997	UNKNOWN	C/CPAF	NAVSEA	08/97	10/98	1	$802	YES	NO	
HY141	U/W Ship Husb Inspec Sys FY 1997	UNKNOWN	C/CPAF	NAVSEA	03/97	07/97	5	$104.6	YES	NO	
HY142	Salvage Air Compressor FY 1997	UNKNOWN	C/CPAF	NAVSEA	03/97	03/98	5	$238.4	YES	NO	
HY143	Salvage Air Hose System FY 1997	UNKNOWN	C/CPAF	NAVSEA	03/97	10/97	3	291.7	YES	NO	
HY145	Cofferdam System FY 1998	UNKNOWN	C/CPAF	NAVSEA	01/99	04/99	9	$49.8	YES	NO	
HY146	Propeller Grooming Kit FY 1998	UNKNOWN	C/CPAF	NAVSEA	02/99	05/99	5	$89.4	YES	NO	

REMARKS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP, N BA 1: Ships Support Equipment	Diving and Salvage Equipment	81HY

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HY147 ROV Telemetry System											
	FY 1998	UNKNOWN	C/CPAF	NAVSEA	02/98	11/99	1	$914	YES	NO	
HY151 Closed Cycle Hull Cleaning System											
	FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	07/96	09/96	2	$467	YES	NO	
	FY 1999	UNKNOWN	C/CPAF	NAVSEA	01/99	03/99	2	$484.5	YES	NO	
HY167 Flyaway Weld Van											
	FY 1998	UNKNOWN	C/CPAF	NAVSEA	01/98	06/98	2	$232	YES	NO	
HY170 LWT Hydraulic Power Unit											
	FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	04/96	06/97	15	$38.7	YES	NO	
RESERVE EQUIPMENT - (N869)											
HY105 Lightweight Dive System											
	FY 1995	GPC Norfolk, VA	C/CPAF	NAVSEA	06/95	11/96	2	$130	YES	NO	
	FY 1996	GPC Norfolk, VA	C/CPAF	NAVSEA	04/96	04/97	2	$117.5	YES	NO	

REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP, N BA 1: Ships Support Equipment	Diving, Salvage, Reserve Equipment, and Installation/Alteration	

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HY178	H.P. Air Compressors										
	FY 1997	UNKNOWN	C/CPAF	NAVSEA	05/97	11/97	4	$72.5	YES	NO	
	FY 1998	UNKNOWN	C/CPAF	NAVSEA	05/98	11/98	3	$78.3	YES	NO	
	FY 1999	UNKNOWN	C/CPAF	NAVSEA	05/99	11/99	3	$89.3	YES	NO	

REMARKS

Exhibit P-3a, Individual Modification

MODELS OF SYSTEMS AFFECTED: Model Series 322 TYPE MODIFICATION: ShipAlt ATS-1-25 1KP MODIFICATION TITLE: Towing System Modernization

DESCRIPTION/JUSTIFICATION: Modernization of the towing system will enhance a main-mission capability of the ship by improving reliability, maintainability, and safety. The current system uses obsolete controls and drive systems which are unreliable and difficult to support logistically. High utilization of these ships is expected over the next 10-15 year period for towing deactivated, defueld nuclear submarines. The modernization does not utilize centrally procurred material. The majority of the work will be labor, utilizing incidental materials procured by the installation contractor, to modernize existing hardware.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONS: N/A

FINANCIAL PLAN: (TOA, $ in Millions)

	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROC																								
Inst Kit NR																								
A Kit			1	.4	1	.4	1	.4	1	.4														
Comp A																								
Comp B																								
Comp C																								
Eqpt NR																								
Eqpt																								
Eqpt A																								
Eqpt B																								
ECOs																								
Data																								
Training Eq																								
SE																								
Other																								
Other																								
Other																								
ICS																								
Install cost				1.1		.8		1.3		.4														
Total Proc																								

P-1 Shopping List - Item No. 27

Exhibit P-3a, Individual Modification (Continued)

MODELS OF SYSTEMS AFFECTED: Model Series 322 MODIFICATION TITLE: Towing System Modernization

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor

ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: Current Year: Various Budget Year 1: Various Budget Year 2: Various

DELIVERY DATE: Current Year: Various Budget Year 1: Various Budget Year 2: Various

($ in Millions)

Cost	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
(FY95 - 1 Kit)			1	1.1																				
(FY96 - 1 Kit)					1	.8																		
(FY97 - 1 Kit)							1	1.3																
(FY98 - 1 Kit)									1	.4														

Installation Schedule

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In																											
Out																											

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1:SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE EOD UNDERWATER EQUIPMENT (71HZ) (Naval Special Warfare Equipment EOD Forces) BLI #1140			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$5.1	$5.1	$9.1	$8.7	$8.6	$7.6	$8.1	$7.0

ITEM DESCRIPTION/JUSTIFICATION:

This program supports Explosive Ordnance Disposal (EOD) Groups, Units and Detachments worldwide. The EOD diving system was initiated as a development program to supply EOD forces the necessary diving and diving related equipment to fulfill assigned missions. The following are the major end items.

HZ006- GAS TRANSFER SYSTEM: This item provides a method for transferring and mixing breathing gas media into the MK 16 UBA in the field.

HZ011-EOD INFLATABLE CRAFT: These craft will provide EOD units with improved inflatable crafts to support MK 16 diving in an MCM environment. These craft will be sturdy, yet lightweight and will consider low influence signature requirements.

HZ066-OUTFITTING EOD DETACHMENT: This line provides for the initial outfitting of diving systems/equipment which enhance mission capability for established EOD detachments.

HZ075-MOBILE FACILITIES: Provides oxygen clean environment for MK 16 UBA maintenance and a full size mobile recompression chamber for fly away EOD diving operations.

HZ076-DIVER EVALUATION UNIT: An underwater device used to train the EOD diver in underwater diving discipline.

HZ077-UPGRADED UNDERWATER BREATHING APPARATUS (UBA): Provides the product improvement for the MK 16 UBA to increase the Partial Pressure of Oxygen (PPO2) setpoint in order to decrease decompression time.

BUDGET ITEM JUSTIFICATION SHEET P-40 (CONTINUED)	DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OP,N/1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE EOD UNDERWATER EQUIPMENT (71HZ)

HZ078-FULL FACE MASK: Provides for Full Face Masks to be used with MK 16 UBA to provide facial protection during cold water diving and to increase safety for an unconscious diver.

HZ079-VERY SHALLOW WATER MINE COUNTERMEASURES (VSW MCM) INITIAL OUTFITTING: Provides for procurement of equipment and hardware to initial outfit the VSW MCM Unit. This equipment and hardware will allow for initial stand-up of the unit.

HZ080-C4I UPGRADES: Provides for the upgrade of existing EOD Mobile Communication Systems (MCS) to C4I requirements.

HZ081-U/W ACOUSTIC FIRING SYSTEM: Provides the capability to acoustically actuate an explosive charge from a stand off point to neutralize a mine or activiate a lift device.

HZ082-OBSTACLE AVOIDANCE SONAR: Provides EOD MCM and Area Search detachments with the capability to avoid mines ahead of their small craft during operations within a mine field (formerly Forward Looking Sonar).

HZ830-PRODUCTION ENGINEERING: Review all technical data packages prior to procurement and provide procurement instruction to the procuring activity in support of the EOD unified procurement system. Provides production engineering support for all EOD production contracts.

HZ850-PRODUCT IMPROVEMENT: Engineering services to improve EOD Systems/Equipment in production to improve maintainablility, utilize current technology, and decrease cost.

HZ860-ACCEPTANCE, TEST, AND EVALUATION: Test, inspect, and accept first articles and, on a 100% basis, the production quantity of EOD tools and equipment being procured. These tools are man-rated, and proper functioning of each item must be verified.

HZTNG-INITIAL TRAINING: Provide training support packages which include curriculum material for Underwater EOD equipment.

WEAPON SYSTEM COST ANALYSIS
P-5

DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY
BA-1:SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
EOD UNDERWATER EQUIPMENT (71HZ)
(Naval Special Warfare Equipment EOD Forces)

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	U/W EXPLOSIVE ORDNANCE DISPOSAL(N85)									
HZ006	GAS TRANSFER SYSTEM	A	7	217						
HZ011	INFLATABLE CRAFT	A	2	106	4	216	4	222	4	229
HZ066	OUTFITTING EOD DET	A	3	985	2	698	3	1,070	3	1,097
HZ075	MOBILE FACILITIES	A	2	1,550	3	2,165	1	729		
HZ076	DIVER EVALUATION UNIT	A	15	900						
HZ077	UPGRADED UBA	A					179	1,698	173	1,721
HZ078	FULL FACE MASK	A			289	722	121	303		
HZ079	VSW MCM INITIALLY OUTFITTING	A						2,937		1,940
HZ080	C4I UPGRADES	A		400				796		
HZ081	U/W ACOUSTIC FIRING SYSTEMS	A							36	1,814
HZ082	OBSTACLE AVOIDANCE	A							6	544
HZ830	PRODUCTION ENGINEERING	A				352		362		375
HZ850	PRODUCT IMPROVEMENT	A		500		681		495		510
HZ860	ACCEPTANCE, TEST & EVAL	A		295		195		318		328
HZTNG	INITIAL TRAINING	A		128		45		120		120
	TOTAL			5,081		5,074		9,050		8,678

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING
P-5A

DATE
February 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/BA-1:SHIPS SUPPORT EQUIP

P-1 ITEM NOMENCLATURE
EOD UNDERWATER EQUIPMENT

SUBHEAD
71HZ

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HZ006											
1996	NAVEODTD	INDIAN HEAD, MD	WR	NAVSEA	02/96	02/97	7	31.0	YES	NO	
HZ011											
1996	SURFLANT/SURFPAC	NORFOLK, VA/SD, CA	WR	NAVSEA	02/96	02/97	2	53.0	YES	NO	
1997	SURFLANT/SURFPAC	NORFOLK, VA/SD, CA	WR	NAVSEA	02/97	02/98	4	54.0	YES	NO	
1998	SURFLANT/SURFPAC	NORFOLK, VA/SD, CA	WR	NAVSEA	02/98	02/99	4	55.5	YES	NO	
1999	SURFLANT/SURFPAC	NORFOLK, VA/SD, CA	WR	NAVSEA	02/99	02/00	4	57.0	YES	NO	
HZ066											
1996	SURFLANT/SURFPAC	NORFOLK, VA/SD, CA	WR	NAVSEA	02/96	06/96	3	328.3	YES	NO	
1997	SURFLANT/SURFPAC	NORFOLK, VA/SD, CA	WR	NAVSEA	02/97	06/97	2	349.0	YES	NO	
1998	SURFLANT/SURFPAC	NORFOLK, VA/SD, CA	WR	NAVSEA	02/98	06/98	3	357.0	YES	NO	
1999	SURFLANT/SURFPAC	NORFOLK, VA/SD, CA	WR	NAVSEA	02/99	06/99	3	365.6	YES	NO	
HZ075											
1996	CSS	PANAMA CITY, FL	WR	NAVSEA	01/96	11/96	2	775.0	YES	NO	
1997	CSS	PANAMA CITY, FL	WR	NAVSEA	02/97	11/97	3	721.7	YES	NO	
1998	CSS	PANAMA CITY, FL	WR	NAVSEA	02/98	11/98	1	729.0	YES	NO	
HZ076											
1996	APL/WASH	SEATTLE, WA	PD	SPAWAR	06/96	06/97	15	60.0	YES	NO	
HZ077											
1998	NAVEODTD	INDIAN HEAD, MD	WR	NAVSEA	06/98	06/99	179	9.5	NO	NO	
1999	NAVEODTD	INDIAN HEAD, MD	WR	NAVSEA	02/99	02/00	173	10.0	NO	NO	
HZ078											
1997	NAVEODTD	INDIAN HEAD, MD	WR	NAVSEA	03/97	09/97	289	2.5	NO	NO	
1998	NAVEODTD	INDIAN HEAD, MD	WR	NAVSEA	02/98	08/98	121	2.5	NO	NO	

REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING
P-5A

DATE
February 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/BA-1:SHIPS SUPPORT EQUIP

P-1 ITEM NOMENCLATURE
EOD UNDERWATER EQUIPMENT

SUBHEAD
71HZ

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
HZ081											
1999	NSWC IH	INDIAN HEAD, MD	WR	NAVSEA	02/99	02/00	36	50.4	NO	NO	
HZ082											
1999	NAVEODTD	INDIAN HEAD,MD	WR	NAVSEA	06/99	06/00	6	90.6	NO	NO	

REMARKS

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA1: SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD STANDARD BOATS/81H0 BLI: 1210			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY	36	16	68	26	38	171	42	121
COST (In Millions)	$5.8	$4.5	$4.9	$5.6	$6.2	$5.6	$9.6	$10.6

Boats are procured to fill allowances established by CNO and NAVSEA and to replace boats now in service which are beyond economical repair at shore activities and aboard ships. Total inventory objectives change based on Fleet requirements. P-23B and memo entries describe procurement plans to support the inventory objective as of this dated budget submit.

H0001 15m (50ft) WORKBOAT - (Steel) Used for all types of service e.g., diving, pushers, ammo/cargo handling, etc. Service life is 25 years.

H0002 15m (50ft) UTILITY BOAT - (Fiberglass) Used for transporting crews and cargo on AE, AOE, AR, AS, CV, CVN, LSD, LHD, and at shore activities. Service life 20 years.

H0005 7m (22ft) UTILITY BOAT - (Fiberglass) Used for general utility, supply and mail transport, at shore activities. Service life is 10 years.

H0006 8m (26ft) PERSONNEL BOAT - (Fiberglass) Used to transport personnel from ship to shore, as a mail carrier, and as a small cargo transport. Service life is 20 years.

H0009 14 ft PUNTS - (Aluminum) Used on auxiliaries, combatants, carriers, and amphibious as work platforms for maintenance inspection of ships' hull, in drydock and at shore activities. Service life is 3 years.

H0016 12m (40ft) PERSONNEL BOAT - (Fiberglass) used for officer/personnel transportation on carriers and shore activities. Service life is 20 years.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD STANDARD BOATS/81H0

H0018 12m (40ft) UTILITY BOAT - (Fiberglass) Carried as ship's boat or assigned to a shore activity to carry personnel and cargo. Service life is 20 years.

H0025 SOLAS ENCAPSULATED LIFEBOAT - (Fiberglass) Used on Military Sealift Command ships as enclosed lifeboats. Service life is 20 years.

H0028 7m (24ft) RIGID INFLATABLE BOAT (RIB) - (Fiberglass) Used as ships' lifeboats, rescue boats and liberty boats, and for general transportation on auxiliaries, combatants, carriers, amphibious, and shore activities. Currently being installed as replacements for presently assigned 26 ft MWBs on combatant ships. Anticipated service life is 20 years.

H0030 22 ft EOD SUPPORT BOAT - (Fiberglass) Used for MK 16 UBA/Diving Training, Mammal Operations, Ordnance recovery, parachute insertion support and Command and Control. Service life of 10 years.

H0031 27 ft EOD Support Boat - (Fiberglass) Used for area search, MK 5 Mammal Systems, diving training and operations, ordnance/mine recovery and Command and Control. Service life is 10 years.

H0830 PRODUCTION ENGINEERING - Used for development of technical data packages, technical support, Test & Evaluation, manual development and printing, trials, boat inspections, etc.

WEAPONS SYSTEM COST ANALYSIS EXHIBIT
P-5

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY/BA1: SHIPS SUPPOR

P-1 ITEM NOMENCLATURE/SUBHEAD: STANDARD BOATS/81H0

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
H0001	15M (50 FT) WORK BOAT		5	$1,817	0	$0	8	$3,039	8	$3,106
H0002	15M (50 FT) UTILITY BOAT		0	$0	7	$1,950	0	$0	0	$0
H0005	7M (22FT) UTILITY BOAT		10	$1,041	0	$0	0	$0	16	$1,734
H0006	8M (26FT) PERSONNEL BOAT		0	$0	0	$0	0	$0	0	$0
H0007	10M (33FT) UTILITY BOAT		0	$0	0	$0	0	$0	0	$0
H0009	14 FT PUNT		0	$0	0	$0	55	$44	0	$0
H0016	12M (40FT) PERSONNEL BOAT		0	$0	7	$1,890	4	$1,066	0	$0
H0018	12M (40FT) UTILITY BOAT		0	$0	0	$0	0	$0	0	$0
H0025	SOLAS LIFEBOAT		0	$0	0	$0	0	$0	0	$0
H0026	70' PERSONNEL BOAT		0	$0	0	$0	0	$0	0	$0
H0028	7M (24FT) RIGID INFLATABLE BOAT		21	$2,373	0	$0	0	$0	0	$0
H0030	22' EOD SUPPORT BOAT		0	$0	2	$249	0	$0	0	$0
H0031	27' EOD SUPPORT BOAT		0	$0	0	$0	0	$0	2	$320
H0032	32' EOD SUPPORT BOAT		0	$0	0	$0	1	$259	0	$0
H0033	13M (42FT) PERSONNEL BOAT		0	$0	0	$0	0	$0	0	$0
H0034	13M (42FT) UTILITY BOAT		0	$0	0	$0	0	$0	0	$0
H0830	PRODUCTON ENGINEERING			$293		$292		$287		$244
H0900	CONSULTING SERVICES			$280		$79		$237		$172
			36	5804	16	4460	68	4932	26	5576
	NOTE: ALL BOAT TYPES SHARED BY ALL SPONS (N09, N1, N7, N8, N4) TOTALS INCLUDE PEO FUNDING									

DD FORM 2446, JUN 86

P-1 SHOPPING LIST ITEM NO. 29 **PAGE NO.** 3

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT
P-5A

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY/BA1: SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: STANDARD BOATS

SUBHEAD: 81H0

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
H0001	15M (50FT) WORKBOAT										
	1996	UNKNOWN	C/FP	NAVSEA	Dec-96	Dec-97	5	363.4	YES	NO	
	1998	UNKNOWN	OPT	NAVSEA	Nov-97	Nov-98	8	379.9	YES	NO	
	1999	UNKNOWN	OPT	NAVSEA	Oct-98	Oct-99	8	388.3	YES	NO	
H0002	15M (50FT) UTILITY BOAT										
	1997	UNKNOWN	C/FP	NAVSEA	Nov-96	Nov-97	7	278.5	YES	NO	
H0005	7M (22FT) UTILITY BOAT										
	1996	NORTHPORT, WI	OPT	NAVSEA	Mar-96	Mar-97	10	103.2	YES	NO	
	1999	UNKNOWN	C/FP	NAVSEA	Oct-98	Oct-99	16	108.4	YES	NO	
H0009	14 FT PUNT										
	1998	NORTHPORT, WI	C/FP	NAVSEA	Nov-97	Nov-98	55	0.8	YES	NO	
H0016	12M (40FT) PERSONNEL BOAT										
	1997	UNKNOWN	C/FP	NAVSEA	Mar-97	Mar-98	7	270.0	YES	NO	
	1998	UNKNOWN	OPT	NAVSEA	Mar-98	Mar-99	4	266.5	YES	NO	
H0028	7M (24FT) RIGID INFLATABLE BOAT										
	1996	NORTHPORT	OPT	NAVSEA	Dec-96	Dec-97	25	113.0	YES	NO	
H0030	22' EOD SUPPORT BOA										
	1997	BOSTON WHALER, FL	C/FP	NRCC SD	Jan-97	Jan-98	2	127.0	YES	NO	
H0031	27' EOD SUPPORT BOAT										
	1999	BOSTON WHALER, FL	C/FP	NRCC SD	Oct-98	Oct-99	2	160.0	YES	NO	
H0032	32' EOD SUPPORT BOAT										
	1998	BOSTON WHALER, FL	C/FP	FISC NORF	Oct-97	Oct-98	1	259.0	YES	NO	

REMARKS

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P-1 SHOPPING LIST

ITEM NO. 29

PAGE NO. 4

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B							DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA1: SHIPS SUPPOR				P-1 ITEM NOMENCLATURE/SUBHEAD STANDARD BOATS/81H0				
ITEM/PROJECT UNIT	TOTAL I0 / REQUIREMENT FY99	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 95/96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 97 PROGRAM FUNDS	PLANNED BUDGET YEARS (98/99) PROCUREMENT	BALANCE	PHASING RATIONALE
15M (5OFT) WB	249	15	162	5	0	16	-51	
15M (50FT) UB	108	2	86	0	7	0	-13	
7M (22FT) UB	327	20	234	10	0	16	-47	
8M (26FT) PE	119	17	103	0	0	0	1	
14FT PUNT	469	154	256	0	0	55	-4	
12M (40FT) PE	88	2	62	0	7	4	-13	
12M (40FT) UB	56	8	51	0	0	0	3	
7M (24FT) RIB	300	8	251	51	0	0	10	
22' EOD SB	67	0	63	0	2	0	-2	
27' EOD SB	27	0	23	0	0	2	-2	
32' EOD SB	2	0	1	0	0	1	0	

NOTES:
BOATS MUST BE PROCURED IN 'ECONOMICAL QTYS' - THIS CAN CAUSE A "BALANCE" - A POSITIVE BALANCE IS USED TO SUPPORT OVERAGE BOATS - A NEGATIVE BALANCE IS A DEFICIENCY. SEE MEMO ENTRIES FOR FURTHER DETAILS

REQUIREMENTS STUDY - MEMO ENTRIES

H0001 - 15M (50') WORKBOAT

FY96 AUTHORIZED ALLOWANCES	202*
FY96 DECOMMISSIONINGS	6
FY97 DECOMMISSIONINGS	2
FY98 DECOMMISSIONINGS	3
FY99 AUTHORIZED ALLOWANCES	191
EXPECTED LOSSES	58*
FY99 IO REQUIREMENT	249

28% BOATS IN SERVICE EXCEEDING 25 YEAR SERVICE LIFE

*FY96 authorized allowances includes other workboats that will require a 50' WB as a replacement--expected losses includes replacement of these other workboats which are over-age.

H0002 - 15M (50') UTILITY BOAT

FY96 AUTHORIZED ALLOWANCES	86
FY96 DECOMMISSIONINGS	3
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	83
EXPECTED LOSSES	25
FY99 IO REQUIREMENT	108

33% BOATS IN SERVICE EXCEEDING 20 YEAR SERVICE LIFE

H0005 - 7M (22') UTILITY BOAT

FY96 AUTHORIZED ALLOWANCES	234
FY96 DECOMMISSIONINGS	0
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	234
EXPECTED LOSSES	93
FY99 IO REQUIREMENT	327

19% OF BOATS IN SERVICE EXCEED 10 YEAR SERVICE LIFE

EXPECTED LOSSES BASED ON ACTUAL AVGS OVER PAST THREE YEARS--18 PER YEAR

H0006 - 8M (26') PERSONNEL BOAT

FY96 AUTHORIZED ALLOWANCES	103
FY96 DECOMMISSIONINGS	0
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	103
EXPECTED LOSSES	16 (BY AGE)
FY99 IO REQUIREMENT	119

20% OF BOATS IN SERVICE EXCEED 20 YEAR SERVICE LIFE

REQUIREMENTS STUDY - MEMO ENTRIES

H0009 - 14' PUNT

FY96 AUTHORIZED ALLOWANCES	256
FY96 DECOMMISSIONINGS	0
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	256
EXPECTED LOSSES	213
FY99 IO REQUIREMENT	469

96% OF BOATS EXCEED 3 YEAR SERVICE LIFE

EXPECTED LOSSES BASED ON ACTUAL AVG OVER PAST THREE YEARS--
77 PER YEAR

H0016 - 12m (40') PERSONNEL BOAT

FY96 AUTHORIZED ALLOWANCES	62
FY96 DECOMMISSIONINGS	0
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	
EXPECTED LOSSES	26
FY99 IO REQUIREMENT	88

47% OF BOATS EXCEED 20 YEAR SERVICE LIFE

H0018 - 12M (40') UTILITY BOAT

FY96 AUTHORIZED ALLOWANCES	51
FY96 DECOMMISSIONINGS	8
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	3
FY99 AUTHORIZED ALLOWANCES	40
EXPECTED LOSSES	16 (BY AGE)
FY99 IO REQUIREMENT	56

H0028 - 7m (24') RIGID INFLATABLE BOAT

FY96 AUTHORIZED ALLOWANCES	291
FY96 DECOMMISSIONINGS	0
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	291
EXPECTED LOSSES	0
INSURANCE SPARES (1 FOR 10) DUE TO LIFESAVING MISSION	29
FY99 IO REQUIREMENT	300

0% OF BOATS EXCEED 20 YR SERVICE LIFE

REQUIREMENTS STUDY - MEMO ENTRIES

H0030 - 22' EOD SUPPORT BOAT

FY96 AUTHORIZED ALLOWANCES	67
FY96 DECOMMISSIONINGS	0
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	67
EXPECTED LOSSES	0
FY99 IO REQUIREMENT	67

H0031 - 27' EOD SUPPORT BOAT

FY96 AUTHORIZED ALLOWANCES	27
FY96 DECOMMISSIONINGS	0
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	27
EXPECTED LOSSES	0
FY99 IO REQUIREMENT	27

H0032 - 32' EOD SUPPORT BOAT

FY96 AUTHORIZED ALLOWANCES	2
FY96 DECOMMISSIONINGS	0
FY97 DECOMMISSIONINGS	0
FY98 DECOMMISSIONINGS	0
FY99 AUTHORIZED ALLOWANCES	2
EXPECTED LOSSES	0
FY99 IO REQUIREMENT	2

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1 OTHER SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE OTHER SHIPS TRAINING EQUIPMENT LI: 1320			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)	$4.9	$1.4	$1.8	$1.9	$4.1	$4.2	$16.0	$3.6

The equipment procured under the Other Ships Training Equipment line supports Hull, Mechanical, and Electrical (HM&E) training requirement:

(H5277) Machinery Control Console Maintenance TTE

A Surface Warfare Training Requirements Review (SWTRR) directed Machinery Plant Central Control System (MPCCS) Technical Training Equipment (TTE) be procured to support maintenance training for MCM 1 Class ships. The MPCCS provides instrumentation for the centralized control of the propulsion plants, electric plant, fireman, auxiliary systems, and the gas turbine generator system.

(H5265) Surface Sustaining TTE

Funds procure HM&E technical training equipment (TTE) identified by the Chief of Naval Education and Training (CNET) and the Surface Warfare Training Requirements Review (SWTRR) process, as approved by CNO. This TTE sustains a better quality of training and/or replaces equipment beyond economical repair.

(H5276) Subsurface Sustaining TTE

Funds procure Subsurface HM&E technical training equipment (TTE) identified by the Type Commander, Chief of Naval Education and Training (CNET) and the Submarine and Integrated Undersea Sonar System (IUSS) Training Requirements Review (SITRR) process, as approved by CNO. This TTE sustains a better quality of training and/or replaces equipment beyond economical repair.

BUDGET ITEM JUSTIFICATION SHEET (continuation) P-40	DATE: Feb-97
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1 OTHER SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE OTHER SHIPS TRAINING EQUIPMENT LI: 1320

(H5281) "BM" SKILL TRAINING TTE

The Boatswain's Mate (BM) Fundamental and Supervisor Courses at EWTGLANT (Little Creek) and EWTGPAC (Coronado) require technical training equipment (TTE) and associated training materials to accommodate planned training throughput as specified in the Navy Training Plan (NTP). The FY 1996 funds will procure and install classroom ship's deck equipment, mockups and curriculum materials.

WEAPONS SYSTEM COST ANALYSIS EXHIBIT (P-5)	A. Appropriation/Budget Activity Title/No. BA-1 OTHER SHIPS SUPPORT EQUIPMENT	B. Weapon Model Series/ Popular Name OTHER SHIPS TRAINING EQUIPMENT	C. Manufacturer Plant City/St. Loc VARIOUS	DATE: February 1997

	WEAPONS SYSTEM COST ELEMENTS	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	EXPEDITIONARY WARFARE (N85)									
H5277	Machinery Sys. Console Maint. TTE		1	3,116		0		0		0
	SURFACE WARFARE (N86)									
H5265	Surface Sustaining TTE			0		396		800		689
H5281	BM Skill Training TTE			873		0		0		0
	SUBMARINE WARFARE (N87)									
H5276	Subsurface Sustaining TTE			956		1,038		1,015		1,199
	-									
	Subtotal (N85/N86)			3,989		396		800		689
	Subtotal (N87)			956		1,038		1,015		1,199
	TOTAL			4,945		1,434		1,815		1,888

P-1 SHOPPING LIST ITEM NO. 30 PAGE NO. 3

BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)

DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY**
BA-1 OTHER SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE: **OTHER SHIPS TRAINING EQUIPMENT**

SUBHEAD: **81H5**

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
H5277	**Machinery Control Console Maint. TTE** [FY 96]	NAVSURFWARCEN PHILADELPHIA, PA	ID/IQ	NAVICP	Aug-96	9/97	1	$3,116	yes	no	
H5265	**Surface Sustaining Training TTE** [FY 97-03]	various	various	N'SEALOGCEN	various	various	various	various	yes	yes	
H5281	**BM Skill Training TTE** [FY 96]	various/TBD	various	N'SEALOGCEN	various	various	various	various	yes	no	
H5276	**Subsurface Sustaining TTE** [FY 96-03]	various	various	N'SEA/SEALOG	various	various	various	various	yes	no	

REMARKS

BUDGET ITEM JUSTIFICATION SHEET **DATE: February 1997**
P-1

APPROPRIATION/BUDGET ACTIVITY:
OTHER PROCUREMENT, NAVY
BA:1 SHIPS SUPPORT EQUIPMENT

P-1 ITEM NOMENCLATURE:
PRODUCTION SUPPORT FACILITIES (1415)

		FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY									
COST (IN MILLIONS)		$6.9	$2.9	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4

This budget submission reflects the minimum investment required for industrial plant equipment and other equipment necessary to support Navy managed facilities which are not Defense Business Operations Fund (DBOF) funded.

NAVY EXPERIMENTAL DIVING UNIT--KM003
The Navy Experimental Diving Unit's (NEDU) mission is to support the fleet diver through test and evaluation of diving equipments and procedures as well as hyperbaric systems for NAVSEA, Navy, and DoD activities. Funding is to procure equipment for test, facilities atmospheric control, life support, and physiological systems. These systems not only ensure the safety and lives of NEDU sailors performing experimental dives, but ultimately support the combat readiness and mission success of the fleet sailors who use the equipment tested at NEDU.

MAGNETIC SILENCING FACILITIES--KM006
The Magnetic Silencing Facilities' (MSF) mission is to measure, calibrate, and reduce magnetic signatures of surface ships and submarines. This requires the procurement of magneti measurement systems (ranges), reduction systems, portable ranges and special systems for Mine Counter Measure vessels (MCMs).

NAVSEA HEADQUARTERS EQUIPMENT--KM010
Funding in this line provides automated information system requirements for the Naval Sea Systems Command. The Acquisition Center for Excellence serves as an interactive work place for program managers to assess new process concepts and define program objectives, operates as a virtual prototyping laboratory, and functions as an electronically accessible resource library for the acquisition community.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)							**A DATE:** February 1997			
B APPROPRIATION/BUDGET ACTIVITY: OPN BA-1: SHIPS SUPPORT EQUIPMENT			**C P-1 ITEM NOMENCLATURE:** PRODUCTION SUPPORT FACILITIES (81KM)							
			TOTAL COSTS IN THOUSANDS OF DOLLARS							
COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	(1)	(2)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	LOGISTICS (OP-04)									
KM003	NAVY EXPERIMENTAL DIVING UNIT EQUIP.	A		**659**		**518**		**353**		**373**
KM006	MAGNETIC SILENCING FACILITIES EQUIP.	A		**2160**		**2352**		**0**		**0**
KM010	NAVSEA HEADQUARTERS EQUIPMENT	A		**4072**						
	TOTAL PRODUCTION SUPPORT FACS			**6,891**		**2,870**		**353**		**373**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: Feb-97	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA:1 SHIPS SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE OPERATING FORCES IPE			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	$0.8	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9

This budget submission reflects the minimum investment for machine tools, shop equipment, and other equipment necessary to support maintenance of Fleet industrial capabilities. Upgrade of industrial capability at Afloat and Ashore industrial activities is accomplished by replacement of equipment beyond economic repair and acquisition of improved industrial capabilities as new technology/systems are introduced to the Fleet. Activities covered under this program include any activity where repair tasks are performed, i.e., tenders, shore Intermediate Maintenance Activities, Trident Refit Facilities, Ship Repair Facilities, combatants and amphibious ships with machining capability, Naval base shops, etc. It does not cover Naval Shipyards.

CLASSIFIED SUBMIT

ITEM NO.	PAGE NO.
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BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY (OPN) BA-1 SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE MODERNIZATION SUPPORT LI 1490

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	* $3.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

*

FY96 $2,979K budgeted in the P-1 Pollution Control Equipment - # 14